STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER: NBU 1022-2J3S
2. TYPE OF WORK: DRILL NEW WELL (●) REENTER P&A WELL ( ) DEEPEN WELL ( )		3. FIELD OR WILDCAT: NATURAL BUTTES
4. TYPE OF WELL: Gas Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME: NATURAL BUTTES
6. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE: 720 929-6587
8. ADDRESS OF OPERATOR: P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL: mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE): ST ML 22651	11. MINERAL OWNERSHIP: FEDERAL ( ) INDIAN ( ) STATE (●) FEE ( )	12. SURFACE OWNERSHIP: FEDERAL ( ) INDIAN ( ) STATE (●) FEE ( )
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS: YES (●) (Submit Commingling Application) NO ( )	19. SLANT: VERTICAL ( ) DIRECTIONAL (●) HORIZONTAL ( )

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2362 FSL 1612 FEL	NWSE	2	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	1525 FSL 2050 FEL	NWSE	2	10.0 S	22.0 E	S
At Total Depth	1525 FSL 2050 FEL	NWSE	2	10.0 S	22.0 E	S

21. COUNTY: UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet): 1525	23. NUMBER OF ACRES IN DRILLING UNIT: 620
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed): 20	26. PROPOSED DEPTH: MD: 8706 TVD: 8500
27. ELEVATION - GROUND LEVEL: 5040	28. BOND NUMBER: 22013542	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE: Permit #43-8496

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME: Kevin McIntyre	TITLE: Regulatory Analyst I	PHONE: 720 929-6226
SIGNATURE	DATE: 02/02/2009	EMAIL: Kevin.McIntyre@anadarko.com

API NUMBER ASSIGNED: 43047502170000	APPROVAL: Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	1900		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	1900	36.0			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	1900			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Foamed Cement	265	1.18	15.6

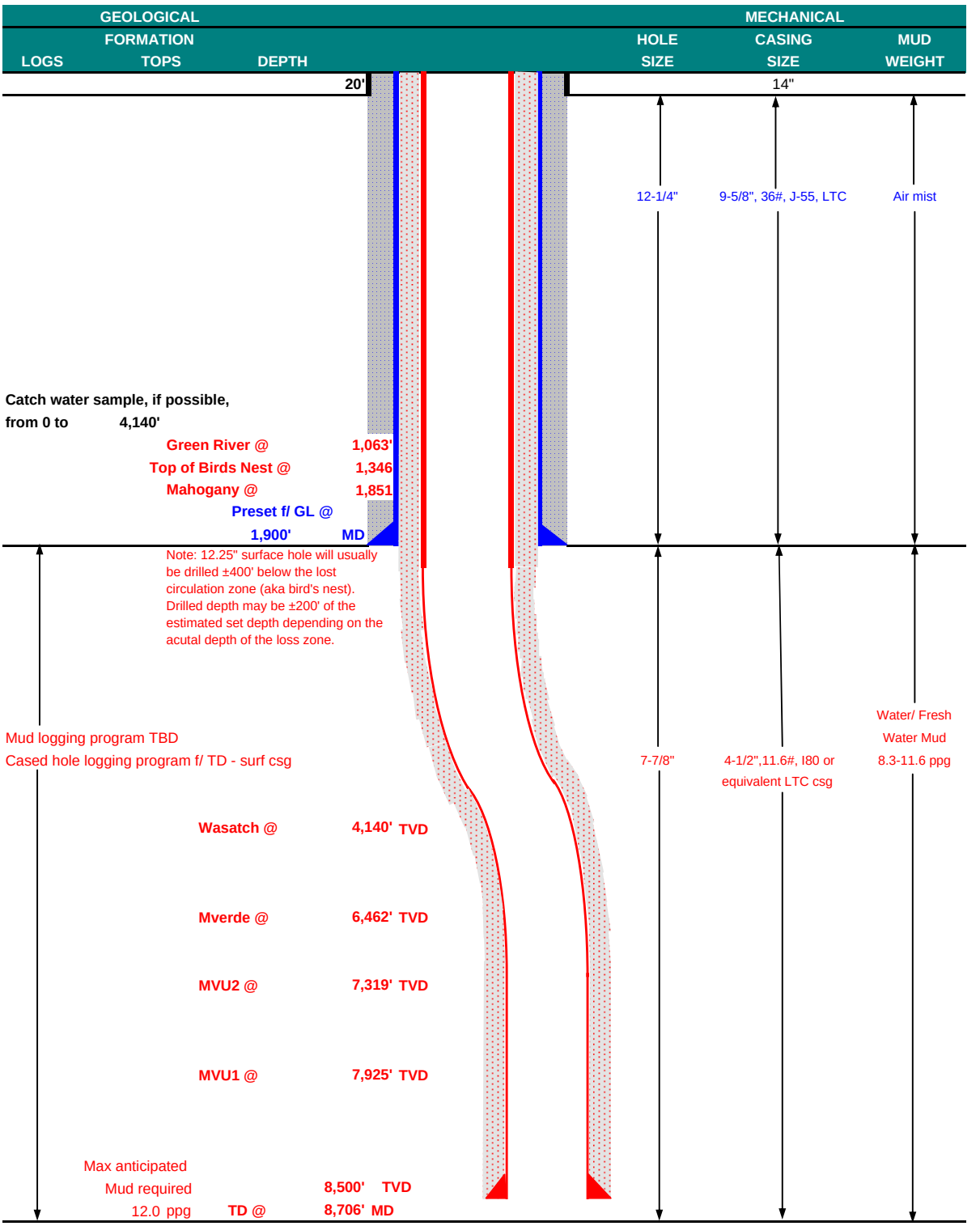
Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	8706		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	8706	11.6			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	8706			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Lite High Strength	350	3.38	11.0
			Pozzuolanic Cement	1240	1.31	14.3

'APIWellNo:43047502170000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	January 20, 2009		
WELL NAME	**NBU 1022-2J3S**			TD	8,500'	TVD	8,706' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	ELEVATION	5,040' GL KB 5,055'
SURFACE LOCATION	NWSE 2362' FSL & 1612' FEL, Sec. 2, T 10S R 22E						
	Latitude: 39.977214	Longitude:	-109.402739		NAD 27		
BTM HOLE LOCATION	NWSE 1525' FSL & 2050' FEL, Sec. 2, T 10S R 22E						
	Latitude: 39.974919	Longitude:	-109.404306		NAD 27		
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals & Surface), BLM, Tri-County Health Dept.						



'APIWellNo:43047502170000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	1900	36.00	J-55	LTC	1.00	2.27	8.43
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	8706	11.60	I-80	LTC	2.21	1.17	2.28

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.0 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3483 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.25 pps Flocele + 3% salt BWOW				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,636'	Premium Lite II + 3% KCl + 0.25 pps	350	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,070'	50/50 Poz/G + 10% salt + 2% gel	1240	40%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

NBU 1022-2J3S
NWSE Sec. 2 T10S R22E
UINTAH COUNTY, UTAH
ST ML 22651

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

Formation	Depth
Uinta	0 - Surface
Green River	1063'
Birds Nest	1346'
Mahogany	1851'
Wasatch	4140'
Mesaverde	6462'
MVU2	7319'
MVL1	7925'
TVD	8500'
TD	8706'

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	Formation	Depth
	Green River	1063'
Water	Birds Nest	1346'
Water	Mahogany	1851'
Gas	Wasatch	4140'
Gas	Mesaverde	6462'
Gas	MVU2	7319'
Gas	MVL1	7925'
Water	N/A	
Other Minerals	N/A	

3. Pressure Control Equipment (Schematic Attached)

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. Drilling Fluids Program:

Please refer to the attached Drilling Program.

6. Evaluation Program:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 8706' TD, approximately equals 5398 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3483 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found

competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

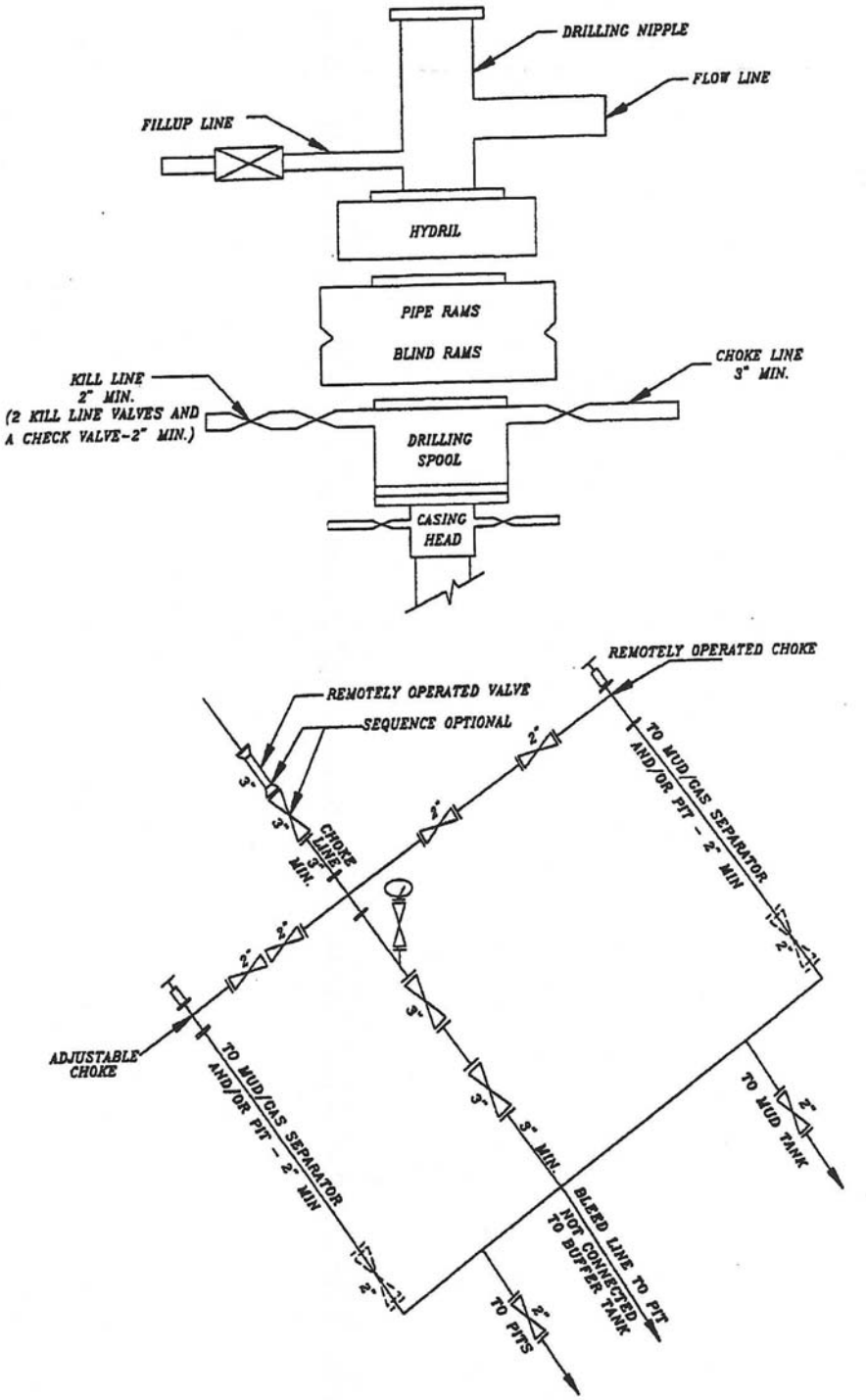
10. Other Information:

Please refer to the attached Drilling Program.

’APIWellNo:43047502170000’

NBU 1022-2J3S

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT
Site: NBU 1022-2J Pad
Well: NBU 1022-2J3S
Wellbore: OH
Design: Plan #1

Kerr McGee Oil and Gas Onshore LP

T M

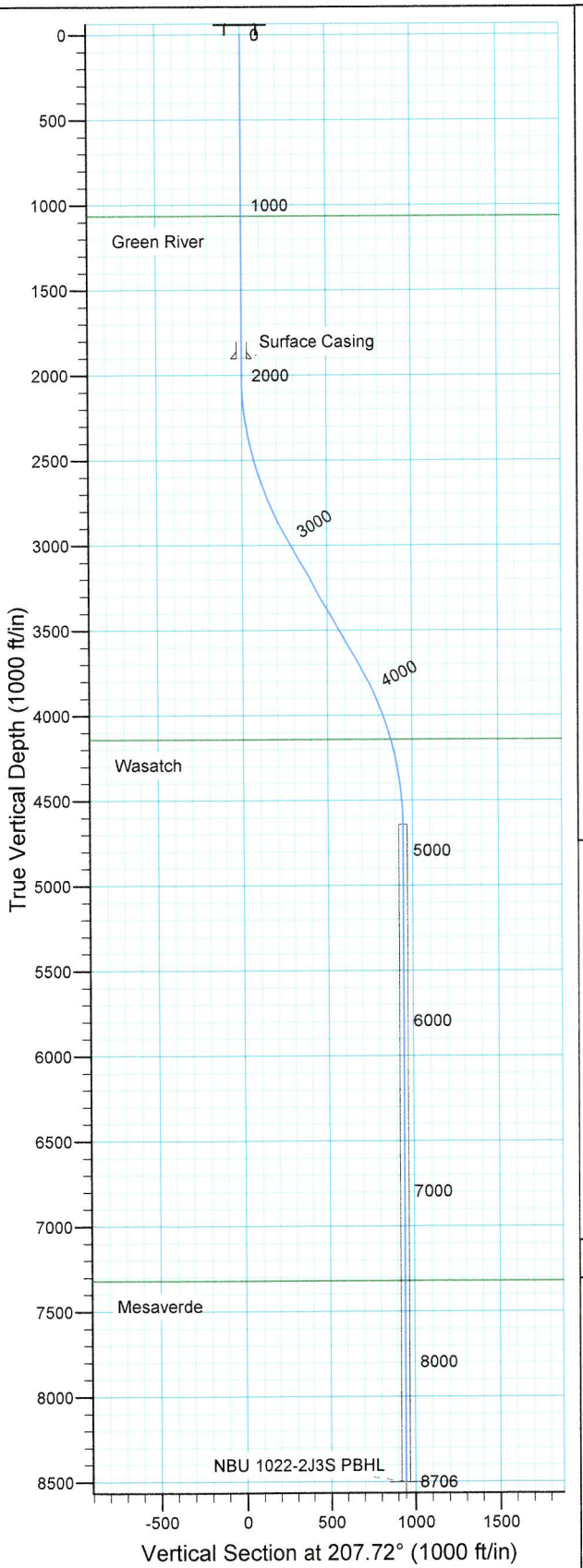
Azimuths to True North
Magnetic North: 11.36°

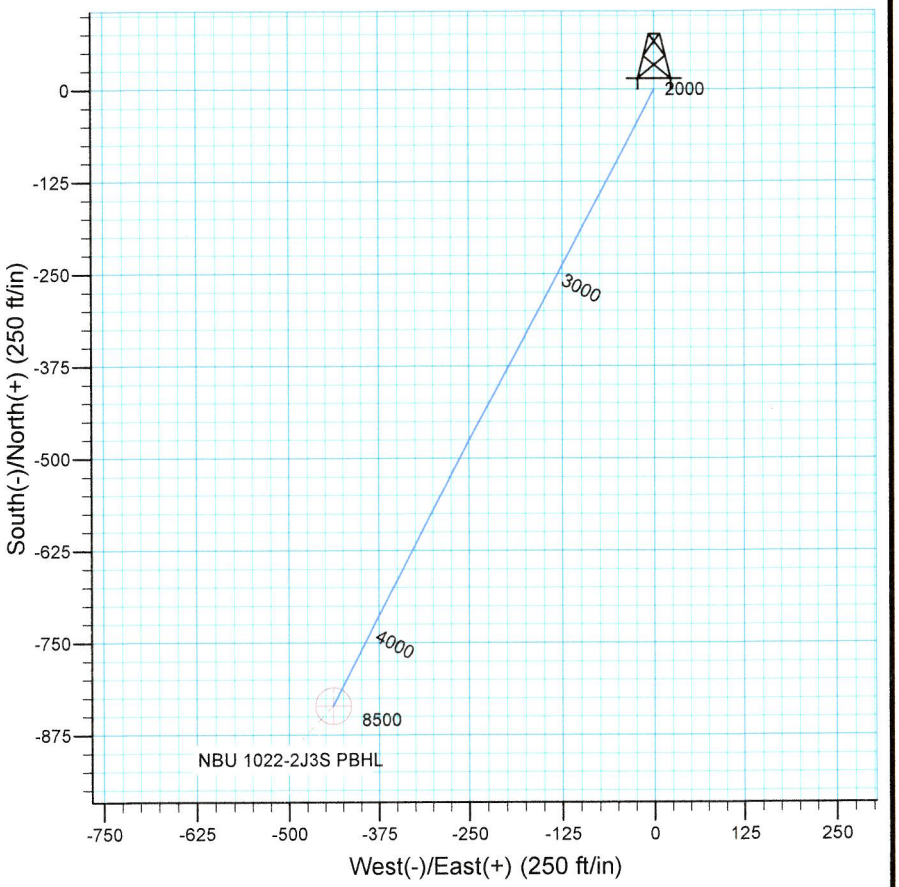
Magnetic Field
Strength: 52621.4snT
Dip Angle: 65.94°
Date: 2008-10-08
Model: IGRF2005-10

WELL DETAILS: NBU 1022-2J3S

GL 5040' & RKB 18' @ 5058.00ft 5040.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	605636.93	2587679.34	39° 58' 37.970 N	109° 24' 9.860 W





Plan: Plan #1 (NBU 1022-2J3S/OH)

Created By: Julie Cruse Date: 2008-10-08

PROJECT DETAILS: Uintah County, UT

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302
Location: Sec 2 T10S R22E
System Datum: Mean Sea Level
Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3000.00	30.00	207.72	2954.93	-226.52	-119.00	3.00	207.72	255.87	
3864.59	30.00	207.72	3703.69	-609.22	-320.05	0.00	0.00	688.17	
4864.59	0.00	0.00	4658.62	-835.73	-439.05	3.00	180.00	944.04	
8705.97	0.00	0.00	8500.00	-835.73	-439.05	0.00	0.00	944.04	NBU 1022-2J3S PBHL

'APIWellNo:43047502170000'

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT
NBU 1022-2J Pad
NBU 1022-2J3S
OH

Plan: Plan #1

Standard Planning Report

08 October, 2008

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Uintah County, UT		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site	NBU 1022-2J Pad, Sec 2 T10S R22E				
Site Position:		**Northing:**	605,694.60 ft	**Latitude:**	39° 58' 38.550 N
From:	Lat/Long	**Easting:**	2,587,635.16 ft	**Longitude:**	109° 24' 10.410 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.34 °

Well	NBU 1022-2J3S, 2362' FSL 1612' FEL					
Well Position	**+N/-S**	0.00 ft	**Northing:**	605,636.93 ft	**Latitude:**	39° 58' 37.970 N
	+E/-W	0.00 ft	**Easting:**	2,587,679.34 ft	**Longitude:**	109° 24' 9.860 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,040.00 ft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2005-10	2008-10-08	11.36	65.94	52,621

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.00	0.00	0.00	207.72	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	30.00	207.72	2,954.93	-226.52	-119.00	3.00	3.00	0.00	207.72	
3,864.59	30.00	207.72	3,703.69	-609.22	-320.05	0.00	0.00	0.00	0.00	
4,864.59	0.00	0.00	4,658.62	-835.73	-439.05	3.00	-3.00	0.00	180.00	
8,705.97	0.00	0.00	8,500.00	-835.73	-439.05	0.00	0.00	0.00	0.00	NBU 1022-2J3S PBH

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,063.00	0.00	0.00	1,063.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	3.00	207.72	2,099.95	-2.32	-1.22	2.62	3.00	3.00	0.00
2,200.00	6.00	207.72	2,199.63	-9.26	-4.87	10.46	3.00	3.00	0.00
2,300.00	9.00	207.72	2,298.77	-20.82	-10.94	23.51	3.00	3.00	0.00
2,400.00	12.00	207.72	2,397.08	-36.95	-19.41	41.74	3.00	3.00	0.00
2,500.00	15.00	207.72	2,494.31	-57.61	-30.27	65.08	3.00	3.00	0.00
2,600.00	18.00	207.72	2,590.18	-82.75	-43.47	93.48	3.00	3.00	0.00
2,700.00	21.00	207.72	2,684.43	-112.30	-59.00	126.85	3.00	3.00	0.00
2,800.00	24.00	207.72	2,776.81	-146.17	-76.79	165.12	3.00	3.00	0.00
2,900.00	27.00	207.72	2,867.06	-184.28	-96.81	208.16	3.00	3.00	0.00
3,000.00	30.00	207.72	2,954.93	-226.52	-119.00	255.87	3.00	3.00	0.00
3,100.00	30.00	207.72	3,041.53	-270.78	-142.25	305.87	0.00	0.00	0.00
3,200.00	30.00	207.72	3,128.13	-315.04	-165.51	355.87	0.00	0.00	0.00
3,300.00	30.00	207.72	3,214.74	-359.31	-188.76	405.87	0.00	0.00	0.00
3,400.00	30.00	207.72	3,301.34	-403.57	-212.02	455.87	0.00	0.00	0.00
3,500.00	30.00	207.72	3,387.94	-447.83	-235.27	505.87	0.00	0.00	0.00
3,600.00	30.00	207.72	3,474.54	-492.10	-258.52	555.87	0.00	0.00	0.00
3,700.00	30.00	207.72	3,561.15	-536.36	-281.78	605.87	0.00	0.00	0.00
3,800.00	30.00	207.72	3,647.75	-580.62	-305.03	655.87	0.00	0.00	0.00
3,864.59	30.00	207.72	3,703.69	-609.22	-320.05	688.17	0.00	0.00	0.00
3,900.00	28.94	207.72	3,734.51	-624.64	-328.15	705.59	3.00	-3.00	0.00
4,000.00	25.94	207.72	3,823.26	-665.42	-349.58	751.66	3.00	-3.00	0.00
4,100.00	22.94	207.72	3,914.29	-702.04	-368.82	793.03	3.00	-3.00	0.00
4,200.00	19.94	207.72	4,007.36	-734.39	-385.81	829.57	3.00	-3.00	0.00
4,300.00	16.94	207.72	4,102.21	-762.39	-400.52	861.20	3.00	-3.00	0.00
4,339.38	15.76	207.72	4,140.00	-772.20	-405.68	872.28	3.00	-3.00	0.00
Wasatch									
4,400.00	13.94	207.72	4,198.59	-785.95	-412.90	887.81	3.00	-3.00	0.00
4,500.00	10.94	207.72	4,296.24	-805.02	-422.92	909.35	3.00	-3.00	0.00
4,600.00	7.94	207.72	4,394.87	-819.53	-430.54	925.74	3.00	-3.00	0.00

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	4.94	207.72	4,494.23	-829.46	-435.76	936.95	3.00	-3.00	0.00
4,800.00	1.94	207.72	4,594.04	-834.76	-438.54	942.95	3.00	-3.00	0.00
4,864.59	0.00	0.00	4,658.62	-835.73	-439.05	944.04	3.00	-3.00	0.00
4,900.00	0.00	0.00	4,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,000.00	0.00	0.00	4,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,100.00	0.00	0.00	4,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,200.00	0.00	0.00	4,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,300.00	0.00	0.00	5,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,400.00	0.00	0.00	5,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,500.00	0.00	0.00	5,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,600.00	0.00	0.00	5,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,700.00	0.00	0.00	5,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,800.00	0.00	0.00	5,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,900.00	0.00	0.00	5,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,000.00	0.00	0.00	5,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,100.00	0.00	0.00	5,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,200.00	0.00	0.00	5,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,300.00	0.00	0.00	6,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,400.00	0.00	0.00	6,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,500.00	0.00	0.00	6,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,600.00	0.00	0.00	6,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,100.00	0.00	0.00	6,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,200.00	0.00	0.00	6,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,400.00	0.00	0.00	7,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,500.00	0.00	0.00	7,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,524.97	0.00	0.00	7,319.00	-835.73	-439.05	944.04	0.00	0.00	0.00
Mesaverde									
7,600.00	0.00	0.00	7,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,700.00	0.00	0.00	7,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,800.00	0.00	0.00	7,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,900.00	0.00	0.00	7,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,000.00	0.00	0.00	7,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,100.00	0.00	0.00	7,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,200.00	0.00	0.00	7,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,300.00	0.00	0.00	8,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,400.00	0.00	0.00	8,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,500.00	0.00	0.00	8,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,600.00	0.00	0.00	8,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,700.00	0.00	0.00	8,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,705.97	0.00	0.00	8,500.00	-835.73	-439.05	944.04	0.00	0.00	0.00

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 1022-2J3S PBHL - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,500.00	-835.73	-439.05	604,791.14	2,587,260.00	39° 58' 29.710 N	109° 24' 15.500 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,900.00	1,900.00	Surface Casing	9.625	13.500

Formations

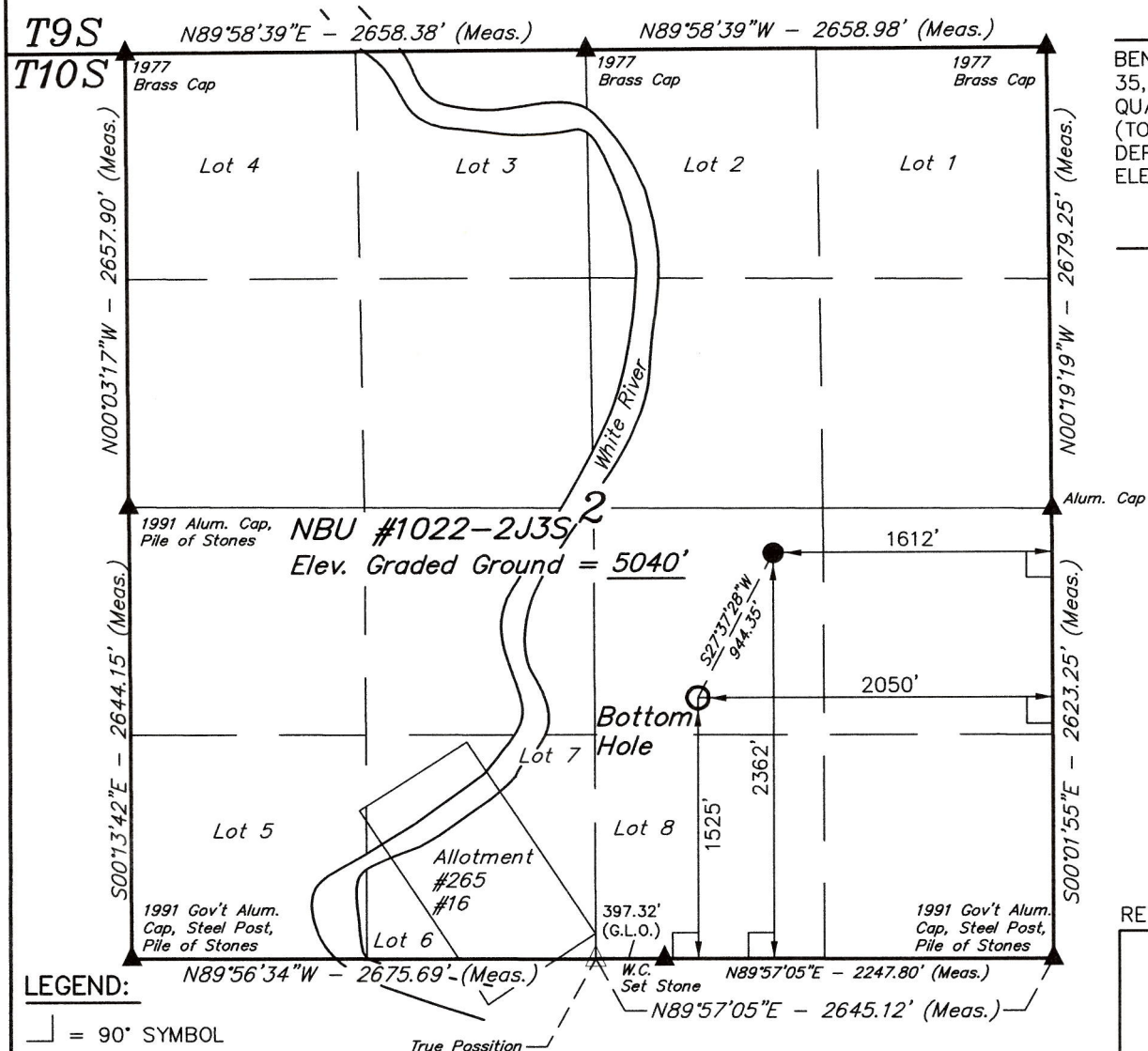
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,063.00	1,063.00	Green River		0.00	
4,339.38	4,140.00	Wasatch		0.00	
7,524.97	7,319.00	Mesaverde		0.00	

'APIWellNo:43047502170000'

Kerr–McGee Oil & Gas Onshore LP

Well location, NBU #1022–2J3S, located as shown in NW 1/4 SE 1/4, of Section 2, T10S, R22E, S.L.B.&M., Uintah County, Utah.

T10S, R22E, S.L.B.&M.

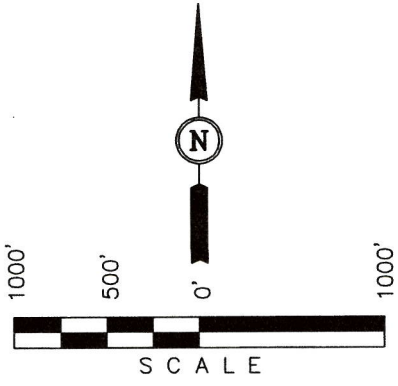


BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 08–26–08 C.C.

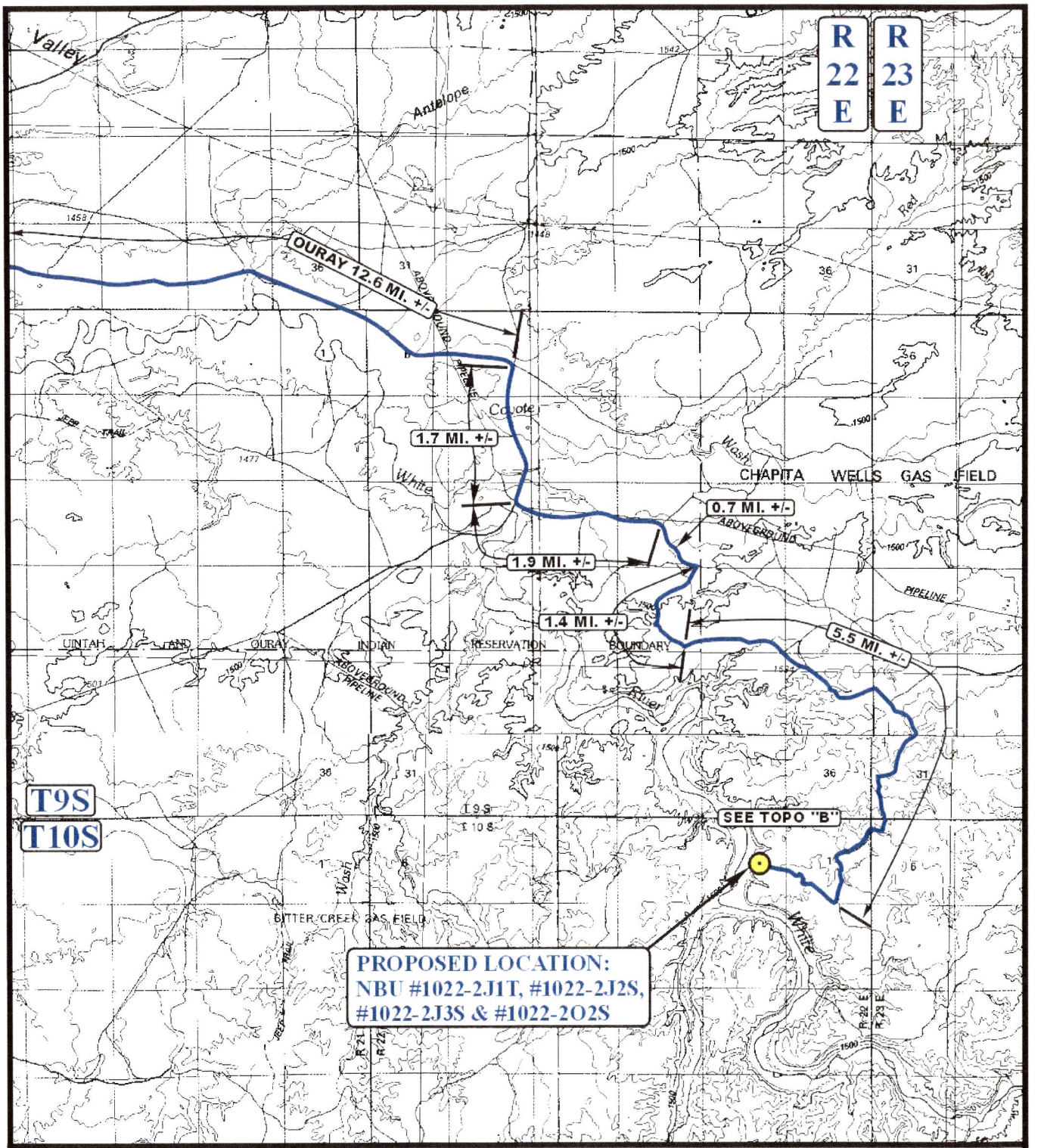
LEGEND:

- ⌟ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE–ESTABLISHED. (Not Set on Ground)

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°58'29.59" (39.974886)	LATITUDE = 39°58'37.85" (39.977181)
LONGITUDE = 109°24'17.95" (109.404986)	LONGITUDE = 109°24'12.31" (109.403419)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 39°58'29.71" (39.974919)	LATITUDE = 39°58'37.97" (39.977214)
LONGITUDE = 109°24'15.50" (109.404306)	LONGITUDE = 109°24'09.86" (109.402739)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE: 1" = 1000'	DATE SURVEYED: 06–17–08	DATE DRAWN: 07–08–08
PARTY: L.K. D.D. S.L.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: Kerr–McGee Oil & Gas Onshore LP	



LEGEND:

PROPOSED LOCATION

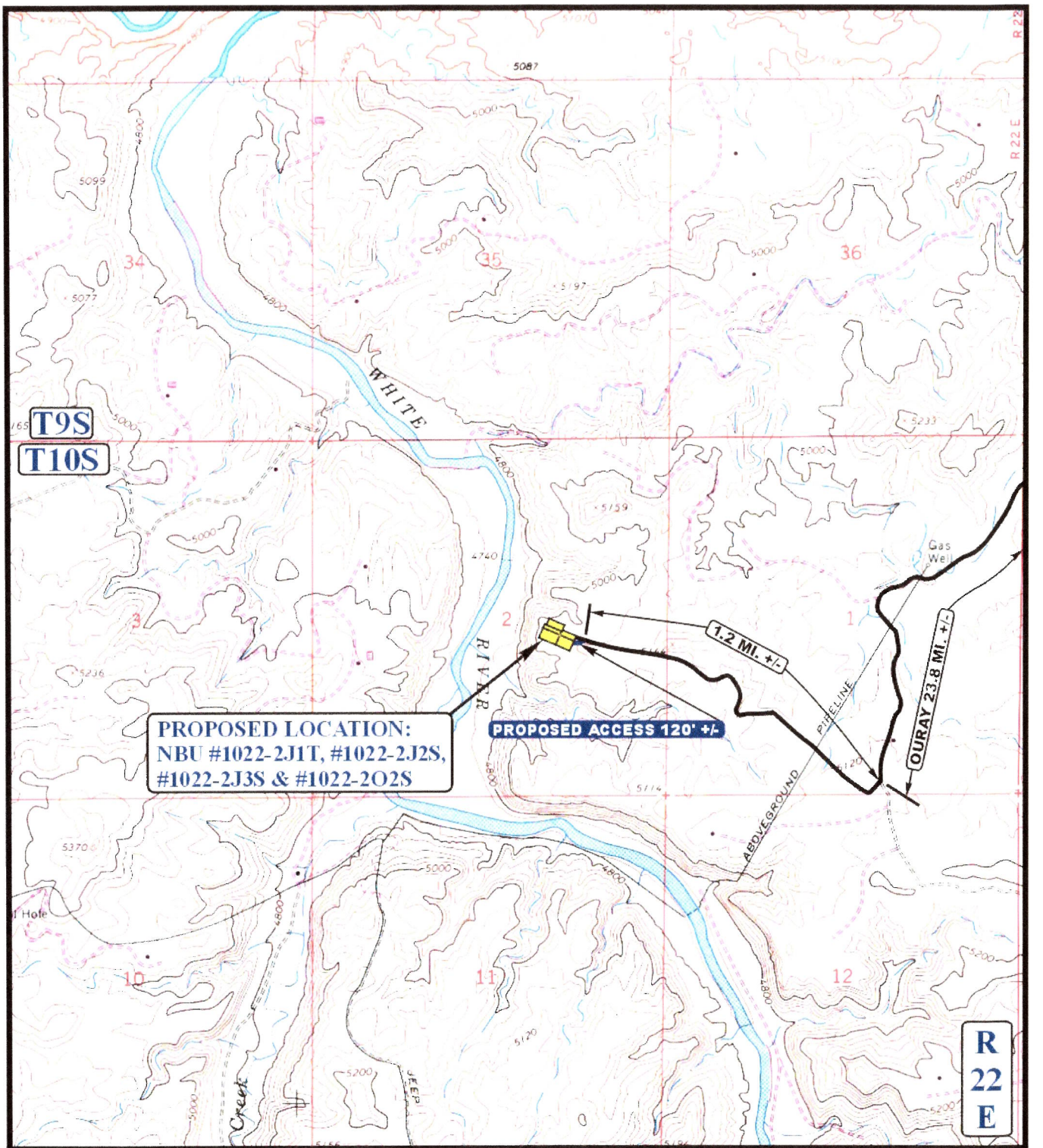
N

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2J1T, #1022-2J2S, #1022-2J3S & #1022-2O2S
SECTION 2, T10S, R22E, S.L.B.&M.
NW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	14 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.J.	REVISED: 09-15-08		



LEGEND:

EXISTING ROAD

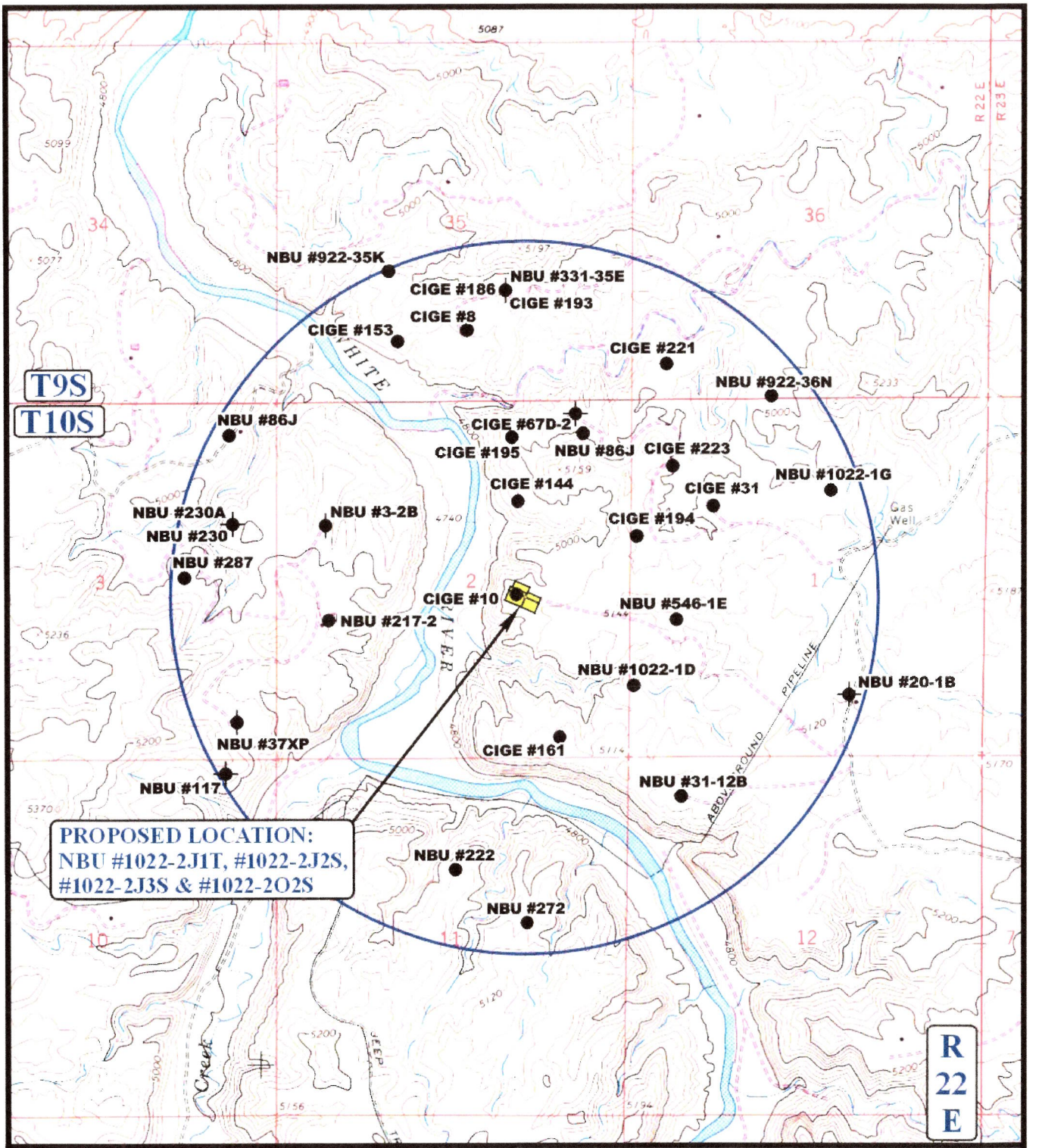
N

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2J1T, #1022-2J2S, #1022-2J3S & #1022-2O2S
SECTION 2, T10S, R22E, S.L.B.&M.
NW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	14 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 09-15-08		



LEGEND:

- DISPOSAL WELLS
- WATER WELLS
- PRODUCING WELLS
- ABANDONED WELLS
- SHUT IN WELLS
- TEMPORARILY ABANDONED

N

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2J1T, #1022-2J2S, #1022-2J3S & #1022-2O2S
SECTION 2, T10S, R22E, S.L.B.&M.
NW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	14 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 09-15-08		

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-2J1T, #1022-2J2S, #1022-2J3S & #1022-2O2S
SECTION 2, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN AN SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 5.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATLEY 1.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 120' TO THE EXISTING LOCATION CIGE #10 AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 56.0 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2J1T, #1022-2J2S, #1022-2J3S & #1022-2O2S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 2, T10S, R22E, S.L.B.&M.

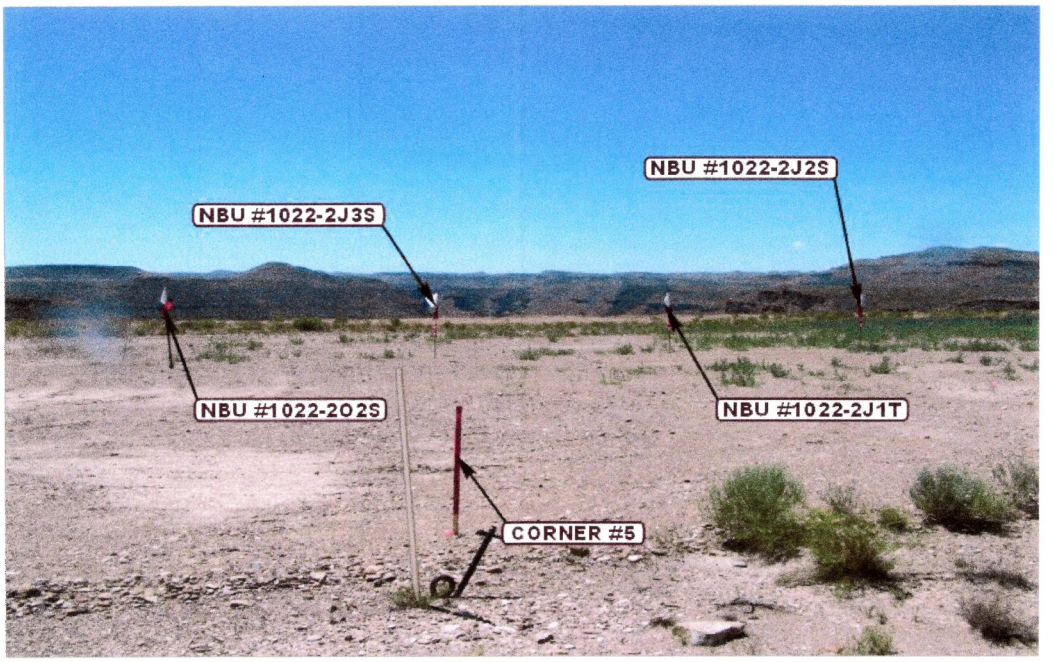


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES — CAMERA ANGLE: SOUTHWESTERLY

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS — CAMERA ANGLE: WESTERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	07 MONTH	14 DAY	08 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: J.J.	REVISED: 09-15-08		

Kerr–McGee Oil & Gas Onshore LP

LOCATION LAYOUT FOR

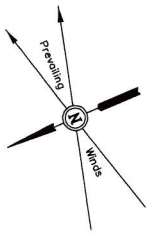
NBU #1022–202S, #1022–2J3S, #1022–2J1T & #1022–2J2S

SECTION 2, T10S, R22E, S.L.B.&M.

NW 1/4 SE 1/4

FIGURE #1

SCALE: 1" = 50'
DATE: 07–08–08
Drawn By: S.L.
Revised: 08–26–08 C.C.



Existing Road

Proposed Access Road

F–2.1'
El. 37.9'

Topsoil Stockpile

F–8.6'
El. 31.4'

80'

C–3.3'
El. 43.3'

Sta. 5+00

Round Corners as Needed

DATA

220'

Pit Topsoil

NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

230'

CATWALK

Existing Pad

PIPE RACKS

FLARE PIT

C–1.3'
El. 41.3'

F–0.1'
El. 39.9'

GRADE
El. 40.0'

S18°55'57"W – 1420.78'
(To Bottom Hole)

C–9.0'
El. 39.0'
(btm. pit)

15' WIDE BENCH/DIKE

20'

100'

60'

DOG HOUSE

160'

Sta. 2+70

F–8.4'
El. 31.6'

C–0.1'
El. 40.1'

F–0.2'
El. 39.8'

RIG

WATER

GRADE
El. 40.0'

S27°37'28"W – 944.35'
(To Bottom Hole)

TRAILER

RESERVE PITS
(10' Deep)

Total Pit Capacity
W/2' of Freeboard
= 26,140 Bbls.±
Total Pit Volume
= 7,090 Cu. Yds

Approx. Top of Cut Slope

MUD TANKS

C–0.1'
El. 40.1'

Existing Wellhead
CIGE #10

TOILET

HOPPER

POWER

TOOLS

FUEL

Approx. Toe of Fill Slope

S47°42'06"W – 508.84'
(To Bottom Hole)

Reserve Pit Backfill & Spoils Stockpile

15' WIDE BENCH/DIKE

250'

Methanol Trough

Existing Pipeline

210'

270'

SLOPE 1 1/2 : 1

Anchor (Typ.)

Separator Skid

Tank

Meter House

Sta. 0+75

Existing Pipeline

STORAGE TANK

F–0.4'
El. 39.6'

TRASH

F–0.1'
El. 39.9'

15' WIDE BENCH/DIKE

30'

C–3.0'
El. 33.0'
(btm. pit)

Sta. 0+00

F–4.3'
El. 35.7'

F–0.3'
El. 39.7'

CIGE #10

(NAD 83)
LATITUDE = 39°58'38.43" (39.977342)
LONGITUDE = 109°24'12.86" (109.403572)
(NAD 27)
LATITUDE = 39°58'38.55" (39.977375)
LONGITUDE = 109°24'10.41" (109.402892)

Elev. Ungraded Ground at #1022–202S Location Stake = 5040.0'

Elev. Graded Ground at #1022–202S Location Stake = 5040.0'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789–1017

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT
Site: NBU 1022-2J Pad
Well: NBU 1022-2J3S
Wellbore: OH
Design: Plan #1

ɜrr McGee Oil and Gas Onshore LP

T M

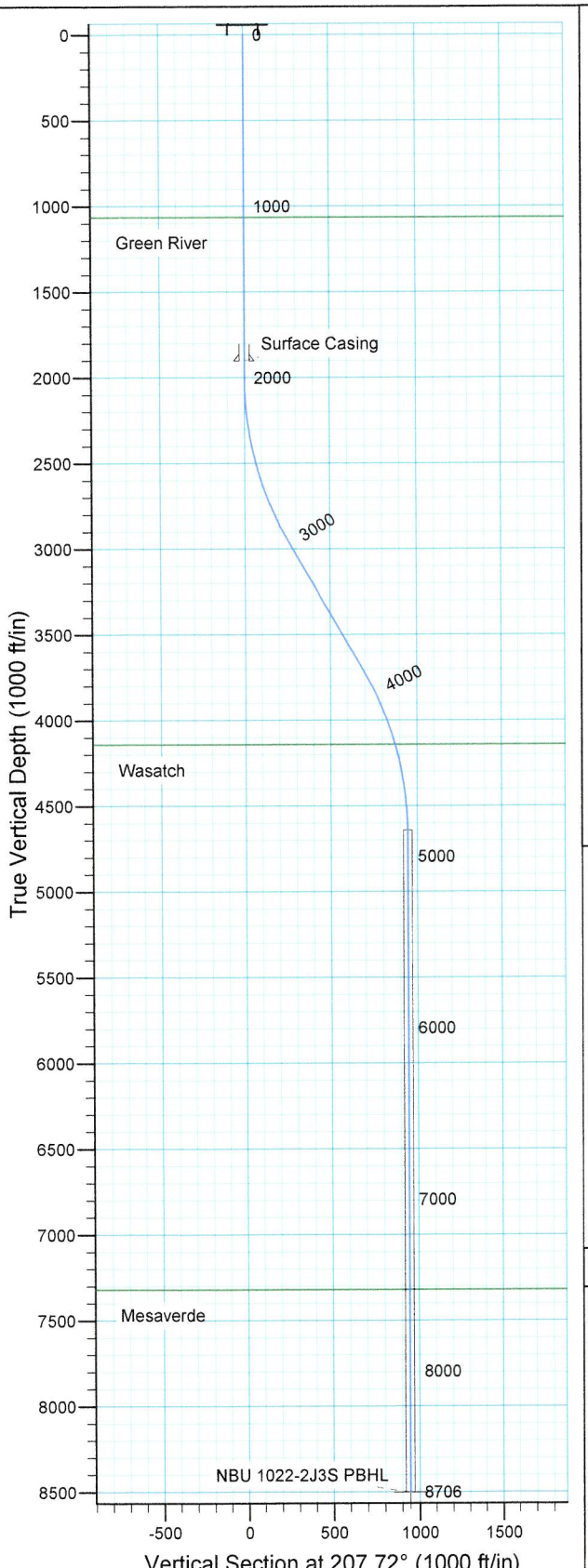
Azimuths to True North
Magnetic North: 11.36°

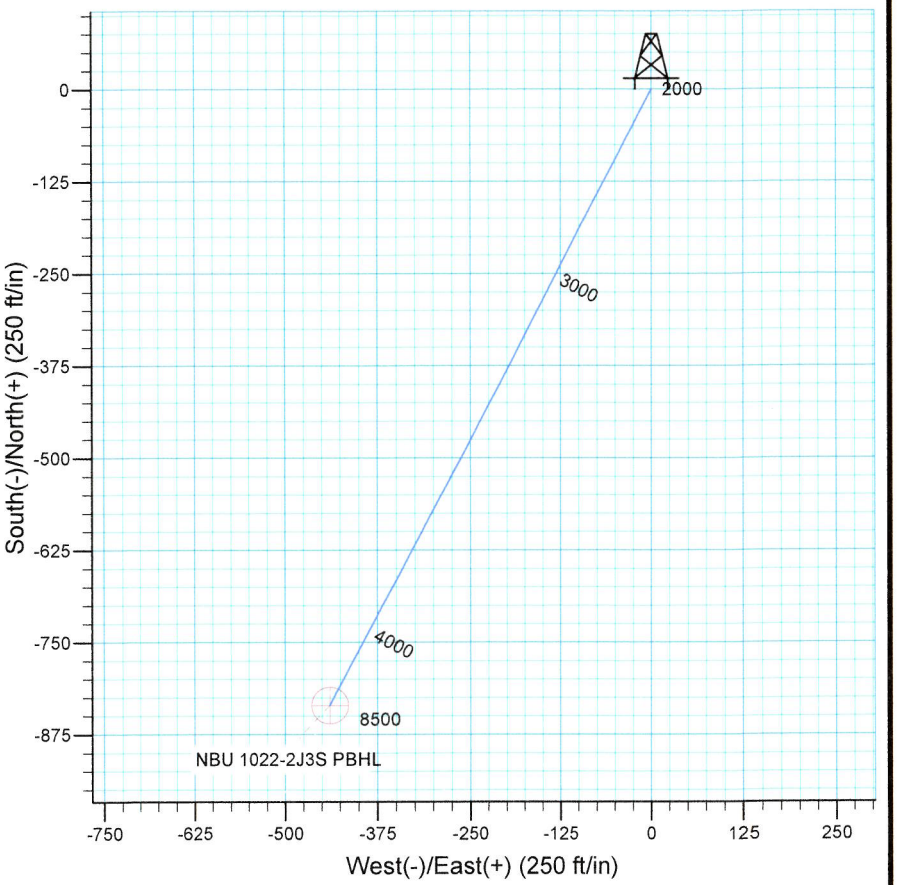
Magnetic Field
Strength: 52621.4snT
Dip Angle: 65.94°
Date: 2008-10-08
Model: IGRF2005-10

WELL DETAILS: NBU 1022-2J3S

GL 5040' & RKB 18' @ 5058.00ft 5040.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	605636.93	2587679.34	39° 58' 37.970 N	109° 24' 9.860 W





Plan: Plan #1 (NBU 1022-2J3S/OH)

Created By: Julie Cruse Date: 2008-10-08

PROJECT DETAILS: Uintah County, UT

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302
Location: Sec 2 T10S R22E
System Datum: Mean Sea Level
Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3000.00	30.00	207.72	2954.93	-226.52	-119.00	3.00	207.72	255.87	
3864.59	30.00	207.72	3703.69	-609.22	-320.05	0.00	0.00	688.17	
4864.59	0.00	0.00	4658.62	-835.73	-439.05	3.00	180.00	944.04	
8705.97	0.00	0.00	8500.00	-835.73	-439.05	0.00	0.00	944.04	NBU 1022-2J3S PBHL

'APIWellNo:43047502170000'

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT
NBU 1022-2J Pad
NBU 1022-2J3S
OH

Plan: Plan #1

Standard Planning Report

08 October, 2008

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Uintah County, UT		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site	NBU 1022-2J Pad, Sec 2 T10S R22E				
Site Position:		**Northing:**	605,694.60 ft	**Latitude:**	39° 58' 38.550 N
From:	Lat/Long	**Easting:**	2,587,635.16 ft	**Longitude:**	109° 24' 10.410 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.34 °

Well	NBU 1022-2J3S, 2362' FSL 1612' FEL					
Well Position	**+N/-S**	0.00 ft	**Northing:**	605,636.93 ft	**Latitude:**	39° 58' 37.970 N
	+E/-W	0.00 ft	**Easting:**	2,587,679.34 ft	**Longitude:**	109° 24' 9.860 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,040.00 ft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2005-10	2008-10-08	11.36	65.94	52,621

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.00	0.00	0.00	207.72	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	30.00	207.72	2,954.93	-226.52	-119.00	3.00	3.00	0.00	207.72	
3,864.59	30.00	207.72	3,703.69	-609.22	-320.05	0.00	0.00	0.00	0.00	
4,864.59	0.00	0.00	4,658.62	-835.73	-439.05	3.00	-3.00	0.00	180.00	
8,705.97	0.00	0.00	8,500.00	-835.73	-439.05	0.00	0.00	0.00	0.00	NBU 1022-2J3S PBH

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,063.00	0.00	0.00	1,063.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	3.00	207.72	2,099.95	-2.32	-1.22	2.62	3.00	3.00	0.00
2,200.00	6.00	207.72	2,199.63	-9.26	-4.87	10.46	3.00	3.00	0.00
2,300.00	9.00	207.72	2,298.77	-20.82	-10.94	23.51	3.00	3.00	0.00
2,400.00	12.00	207.72	2,397.08	-36.95	-19.41	41.74	3.00	3.00	0.00
2,500.00	15.00	207.72	2,494.31	-57.61	-30.27	65.08	3.00	3.00	0.00
2,600.00	18.00	207.72	2,590.18	-82.75	-43.47	93.48	3.00	3.00	0.00
2,700.00	21.00	207.72	2,684.43	-112.30	-59.00	126.85	3.00	3.00	0.00
2,800.00	24.00	207.72	2,776.81	-146.17	-76.79	165.12	3.00	3.00	0.00
2,900.00	27.00	207.72	2,867.06	-184.28	-96.81	208.16	3.00	3.00	0.00
3,000.00	30.00	207.72	2,954.93	-226.52	-119.00	255.87	3.00	3.00	0.00
3,100.00	30.00	207.72	3,041.53	-270.78	-142.25	305.87	0.00	0.00	0.00
3,200.00	30.00	207.72	3,128.13	-315.04	-165.51	355.87	0.00	0.00	0.00
3,300.00	30.00	207.72	3,214.74	-359.31	-188.76	405.87	0.00	0.00	0.00
3,400.00	30.00	207.72	3,301.34	-403.57	-212.02	455.87	0.00	0.00	0.00
3,500.00	30.00	207.72	3,387.94	-447.83	-235.27	505.87	0.00	0.00	0.00
3,600.00	30.00	207.72	3,474.54	-492.10	-258.52	555.87	0.00	0.00	0.00
3,700.00	30.00	207.72	3,561.15	-536.36	-281.78	605.87	0.00	0.00	0.00
3,800.00	30.00	207.72	3,647.75	-580.62	-305.03	655.87	0.00	0.00	0.00
3,864.59	30.00	207.72	3,703.69	-609.22	-320.05	688.17	0.00	0.00	0.00
3,900.00	28.94	207.72	3,734.51	-624.64	-328.15	705.59	3.00	-3.00	0.00
4,000.00	25.94	207.72	3,823.26	-665.42	-349.58	751.66	3.00	-3.00	0.00
4,100.00	22.94	207.72	3,914.29	-702.04	-368.82	793.03	3.00	-3.00	0.00
4,200.00	19.94	207.72	4,007.36	-734.39	-385.81	829.57	3.00	-3.00	0.00
4,300.00	16.94	207.72	4,102.21	-762.39	-400.52	861.20	3.00	-3.00	0.00
4,339.38	15.76	207.72	4,140.00	-772.20	-405.68	872.28	3.00	-3.00	0.00
Wasatch									
4,400.00	13.94	207.72	4,198.59	-785.95	-412.90	887.81	3.00	-3.00	0.00
4,500.00	10.94	207.72	4,296.24	-805.02	-422.92	909.35	3.00	-3.00	0.00
4,600.00	7.94	207.72	4,394.87	-819.53	-430.54	925.74	3.00	-3.00	0.00

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	4.94	207.72	4,494.23	-829.46	-435.76	936.95	3.00	-3.00	0.00
4,800.00	1.94	207.72	4,594.04	-834.76	-438.54	942.95	3.00	-3.00	0.00
4,864.59	0.00	0.00	4,658.62	-835.73	-439.05	944.04	3.00	-3.00	0.00
4,900.00	0.00	0.00	4,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,000.00	0.00	0.00	4,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,100.00	0.00	0.00	4,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,200.00	0.00	0.00	4,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,300.00	0.00	0.00	5,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,400.00	0.00	0.00	5,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,500.00	0.00	0.00	5,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,600.00	0.00	0.00	5,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,700.00	0.00	0.00	5,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,800.00	0.00	0.00	5,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
5,900.00	0.00	0.00	5,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,000.00	0.00	0.00	5,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,100.00	0.00	0.00	5,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,200.00	0.00	0.00	5,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,300.00	0.00	0.00	6,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,400.00	0.00	0.00	6,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,500.00	0.00	0.00	6,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,600.00	0.00	0.00	6,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,100.00	0.00	0.00	6,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,200.00	0.00	0.00	6,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,400.00	0.00	0.00	7,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,500.00	0.00	0.00	7,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,524.97	0.00	0.00	7,319.00	-835.73	-439.05	944.04	0.00	0.00	0.00
Mesaverde									
7,600.00	0.00	0.00	7,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,700.00	0.00	0.00	7,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,800.00	0.00	0.00	7,594.03	-835.73	-439.05	944.04	0.00	0.00	0.00
7,900.00	0.00	0.00	7,694.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,000.00	0.00	0.00	7,794.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,100.00	0.00	0.00	7,894.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,200.00	0.00	0.00	7,994.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,300.00	0.00	0.00	8,094.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,400.00	0.00	0.00	8,194.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,500.00	0.00	0.00	8,294.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,600.00	0.00	0.00	8,394.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,700.00	0.00	0.00	8,494.03	-835.73	-439.05	944.04	0.00	0.00	0.00
8,705.97	0.00	0.00	8,500.00	-835.73	-439.05	944.04	0.00	0.00	0.00

Database:	EDM 2003.16 Multiuser DB	**Local Co-ordinate Reference:**	Well NBU 1022-2J3S
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Project:	Uintah County, UT	**MD Reference:**	GL 5040' & RKB 18' @ 5058.00ft
Site:	NBU 1022-2J Pad	**North Reference:**	True
Well:	NBU 1022-2J3S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 1022-2J3S PBHL - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,500.00	-835.73	-439.05	604,791.14	2,587,260.00	39° 58' 29.710 N	109° 24' 15.500 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,900.00	1,900.00	Surface Casing	9.625	13.500

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,063.00	1,063.00	Green River		0.00	
4,339.38	4,140.00	Wasatch		0.00	
7,524.97	7,319.00	Mesaverde		0.00	

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS
ONSHORE LP'S 73 PROPOSED NBU WELL LOCATIONS
IN TOWNSHIP 10S, RANGE 22E
UINTAH COUNTY, UTAH

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 73 PROPOSED NBU WELL LOCATIONS IN TOWNSHIP 10S, RANGE 22E UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office
and
School and Institutional
Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

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MOAC Report No. 08-268

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United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
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INTRODUCTION

A Class I literature review was completed by Montgomery Archaeological Consultants, Inc. (MOAC) in October 2008 of Kerr-McGee Onshore's 73 proposed NBU well locations in Township 10S, Range 22E. The project area is situated south of the White River and southeast of the Ouray, Uintah County, Utah. The wells are designated NBU 1022-1I, 1022-1J, 1022-1N, 1022-1P, 1022-2A2T,1022-2A3S, 1022-2A4S, 1022-2B2S, 1022-2D, 1022-2F, 1022-2J1T, 1022-2J2S, 1022-2J3S, 1022-2O2S, 1022-03A2T, 1022-03A3S, 1022-03B2S, 1022-03B4T, 1022-03C1S, 1022-04H2CS, 1022-04H3BS, 1022-O3H2T, 1022-03L4BS, 1022-03L3DS, 1022-03M1DS, 1022-03M2DS, 1022-03J3T, 1022-03L2T, 1022-O3N4T, 1022-03P4T, 1022-03O3T, 1022-04K3S, 1022-04M1S, 1022-05H2BS, 1022-05H2CS, 1022-05E4S, 1022-05F2S, 1022-05K1S, 1022-05L1S, 1022-05IT, 1022-06DT, 1022-06ET, 1022-06FT, 1022-06I3AS, 1022-06J4CS, 1022-06O1BS, 1022-06P1CS, 1022-7AT, 1022-7A4BS, 1022-7A4CS, 1022-7B2DS, 1022-08GT, 1022-08IT, 1022-09AT, 1022-11F4S, 1022-11J3S, 1022-11K1T, 1022-11K2S, 1022-11K3S, 1022-11L2S, 1022-11L3S, 1022-11M1S, 1022-13H, 1022-24O, 1022-24O2S, 1022-24P2S, 1022-24P4S, 1022-25H, 1022-32B3S, 1022-32D1S, 1022-32D4AS, 1022-32D4DS, and 1022-35M.

The purpose of this Class I review is to identify, classify, and evaluate the previously conducted cultural resource inventories and archaeological sites in the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1990).

The project area in which Kerr-McGee Onshore's 73 proposed NBU well locations occur was previously inventoried by MOAC in 2007 for the Class III inventory of Township 10 South, Range 22 East (Montgomery 2008; U-07-MQ-1438b,s,p). A file search was completed by consulting MOAC's Class I existing data review of 459 square miles (293,805 acres) covering the Greater NBU study area between Bonanza and Ouray in Uintah County, northeastern Utah (Patterson et al. 2008). Kerr-McGee Oil & Gas Onshore LP proposes to explore and develop oil and natural gas resources throughout the area. Record searches were performed for this Class I project by Marty Thomas at the Utah State Historic Preservation Office (SHPO) on various dates between June 14, 2006 and January 27, 2007. The results of this Class I data review and Class III inventory indicated that no previously recorded sites occur in the current project area.

DESCRIPTION OF THE PROJECT AREA

The project area is situated west of the White River and both sides of Bitter Creek in the Uinta Basin. The legal description is Township 10S, Range 22E, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 24, 25, 32, 36; Township 11S, Range 22E, Sections 1 and 2 (Figures 1, 2 and 3; Table 1). Land status is public land administered by the Bureau of Land Management (BLM) Vernal Field Office and School and Institutional Trust Lands Administration (SITLA) property.

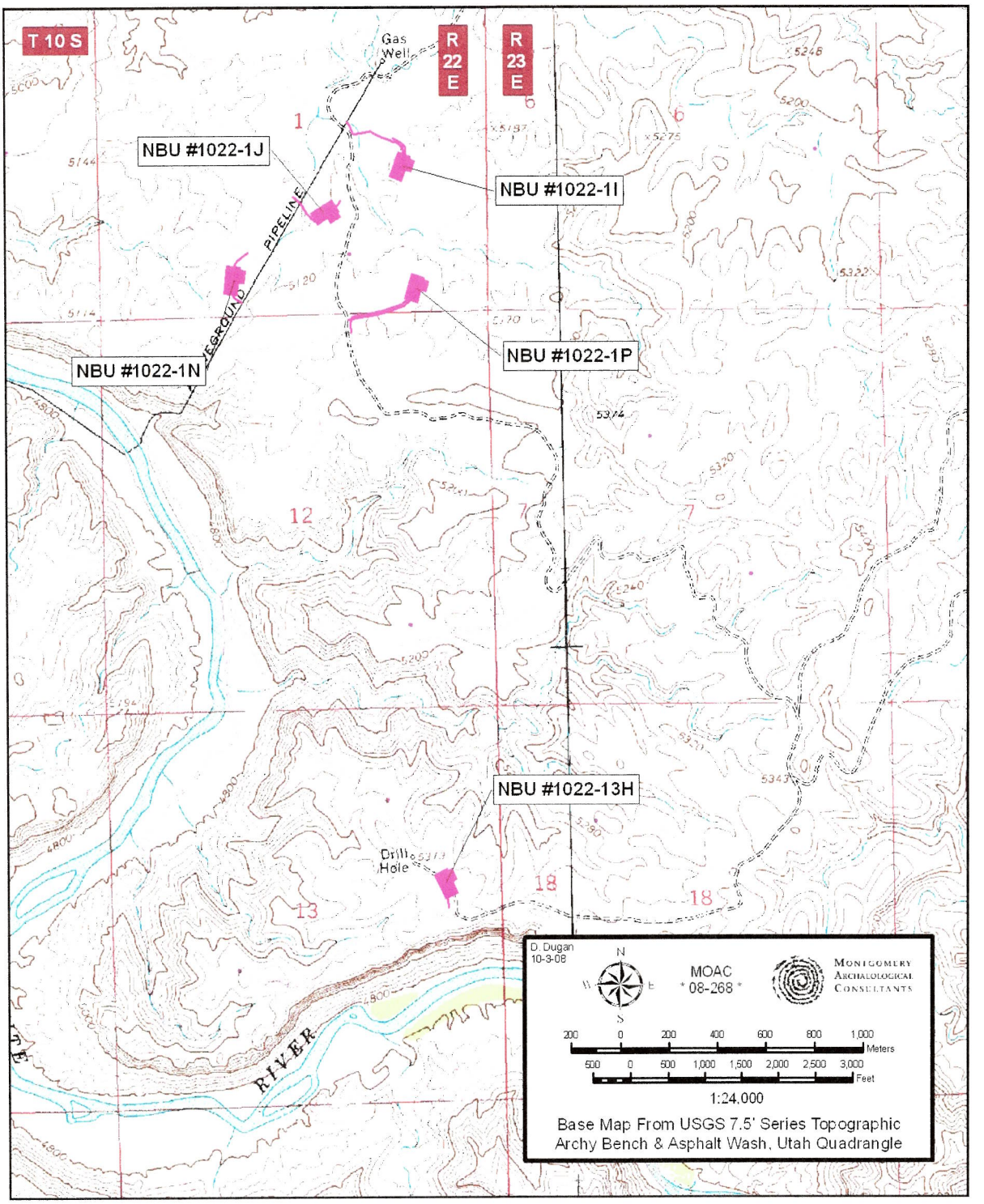

Figure 1. Location of Kerr-McGee Onshore's Well Pads in T10S, R22E.

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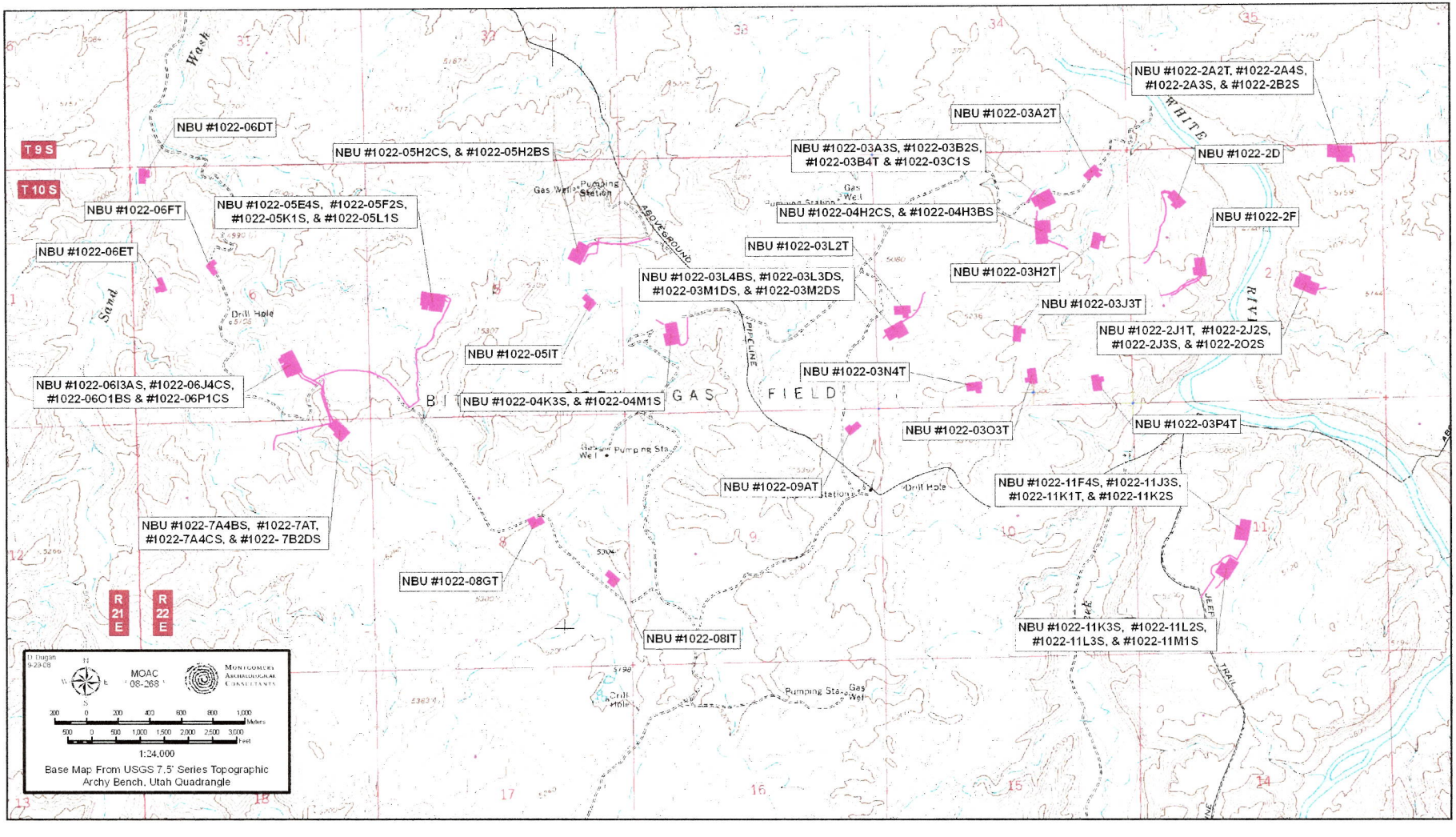

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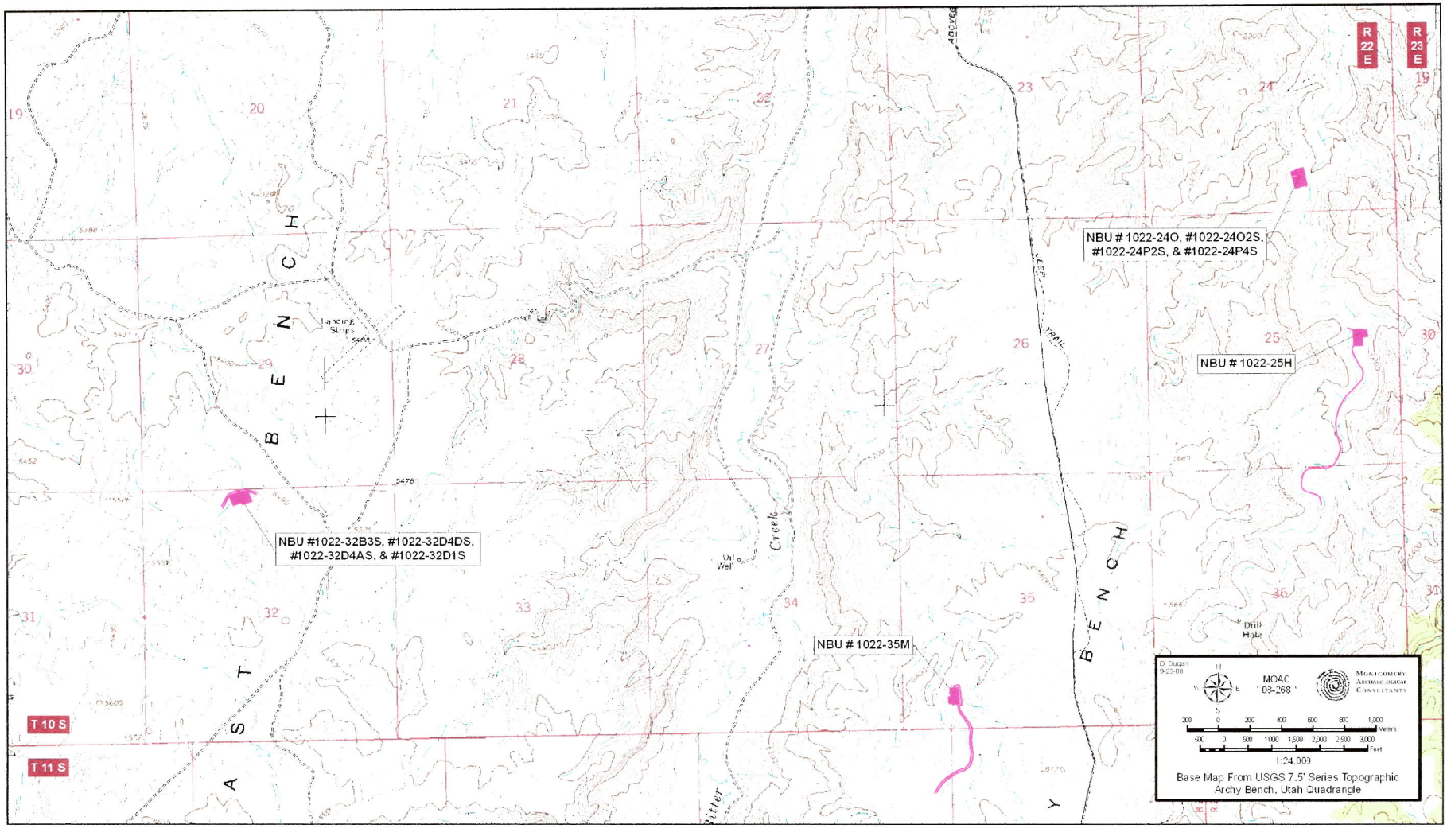


Table 1. Kerr-McGee Onshore's 73 NBU Well Locations.

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-1I	T10S, R22E, Sec. 1 NE/SE	Pipeline: 1000 ft Access: 200 ft	None
NBU 1022-1J	T10S, R22E, Sec. 1 NW/SE	Pipeline: 400 ft Access: 50 ft	None
NBU 1022-1N	T10S, R22E, Sec. 1 SE/SW	Pipeline: 150 ft Access: 200 ft	None
NBU 1022-1P	T10S, R22E, Sec. 1 SE/SE	Pipeline: 1050 ft Access: 1000 ft	None
NBU 1022-2A2T, 1022-2A4S 1022-243S, 1022-2B2S	T10S, R22E, Sec. 2 NE/NE	Access: 200 ft	None
NBU 1022-2D	T10S, R22E, Sec. 2 NW/NW	Pipeline: 1600 ft	None
NBU 1022-2F	T10S, R22E, Sec. 2 SE/NW	Pipeline: 800 ft Access: 1000 ft	None
NBU 1022-2J1T, 1022-2J2S, 1022-2J3S, 1022-202S	T10S, R22E, Sec. 2 NW/SE	Pipeline: 200 ft	None
NBU 1022-03A2T	T10S, R22E, Sec. 3 NE/NE	None	None
NBU1022-03A3S, 1022-03B2S 1022-03B4T, 1022-03C1S	T10S, R22E, Sec. 3 NW/NE	None	None
NBU 1022-04H2CS 1022-04H3BS	T10S, R22E, Sec. 3 SW/NE	Pipeline: 450 ft Access: 200 ft	None
NBU 1022-03H2T	T10S, R22E, Sec. 3 SE/NE	None	None
NBU 1022-03J3T	T10S, R22E, Sec. 3 NW/SE	None	None
NBU 1022-03L2T	T10S, R22E, Sec. 3 NW/SW	None	None
NBU 1022-03L4BS, 1022-03L3DS 1022-03M1DS, 1022-03M2DS	T10S, R22E, Sec. 3 NW/SW	Pipeline: 800 ft Access: 100 ft	None
NBU 1022-03N4T	T10S, R22E, Sec. 3 SE/SW	None	None
NBU 1022-03O3T	T10S, R22E, Sec. 3 SW/SE	None	None
NBU 1022-03P4T	T10S, R22E, Sec. 3 SE/SE	None	None

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-04K3S, 1022-04M1S	T10S, R22E, Sec. 4 NW/SW	Pipeline: 200 ft Access: 600 ft	None
NBU 1022-05H2CS, 1022-05H2BS	T10S, R22E, Sec. 5 SE/NE	Pipeline: 800 ft Access: 1200 ft	None
NBU 1022-05E4S, 1022-05F2S 1022-05K1S, 1022-05L1S	T10S, R22E Sec. 5 NE/SW	Pipeline: 4800 ft Access: 100 ft	None
NBU 1022-05IT	T10S, R22E, Sec. 5 NE/SE	None	None
NBU 1022-06DT	T10S, R22E, Sec. 6 NW/NW	None	None
NBU 1022-06ET	T10S, R22E, Sec. 6 SW/NW	None	None
NBU 1022-06FT	T10S, R22E, Sec. 6 SE/NW	None	None
NBU 1022-06I3AS, 1022-06J4CS 1022-06O1BS, 1022-06P1CS	T10S, R22E, Sec. 6 SW/SE	Pipeline: 1400 ft Access: 450 ft	None
NBU 1022-7A4BS, 1022-7AT 1022-7A4CS, 1022-7B2DS	T10S, R22E, Sec. 7 NE/NE	Pipeline: 1300 ft Access: 1000 ft	None
NBU 1022-08GT	T10SS, R22E, Sec. 8 SW/NE	None	None
NBU 1022-08IT	T10S, R22E, Sec. 8 NE/SE	None	None
NBU 1022-09AT	T10S, R22E, Sec. 9 NE/NE	None	None
NBU 1022-11F4S, 1022-11J3S, 1022-11K1T, 1022-11K2S	T10S, R22E, Sec. 11 NE/SW	Pipeline: 1600 ft	None
NBU 1022-11K3S, 1022-11L2S, 1022-11L3S, 1022-11M1S	T10S, R22E, Sec. 11 NE/SW	Pipeline: 500 ft Access: 250 ft	None
NBU 1022-13H	T10S, R22E, Sec. 13 SE/NE	Pipeline: 100 ft	
NBU 1022-24O, 1022-24O2S 1022-24P2S, 1022-24P4S	T10S, R22E, Sec. 24 SW/SE	None	None
NBU 1022-25H	T10S, R22E, Sec. 25 SE/NE	Pipeline: 4000 ft	None

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-32B3S, 1022-32D4DS 1022-3-2D4AS, 1022-32D1S	T10S, R22E, Sec. 32 NE/NW	Pipeline: 900 ft Access: 800 ft	None
NBU 1022-35M	T10S, R22E, Sec. 35 SW/SW	Pipeline: 2750 ft Access: 2200 ft	None

Environmental Setting

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits, which include Paleocene age deposits and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops (formed by fluvial deposited, stream laid interbedded sandstone and mudstone), and is known for its prolific paleontological localities. Specifically, the inventory area is situated south of the White River and on both sides of Cottonwood Wash. Elevation ranges from 5080 to 5680 ft asl. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, and prickly pear cactus. Modern disturbances include livestock grazing, roads, and oil/gas development.

CLASS I RESULTS AND RECOMMENDATIONS

The Class I literature review of Kerr-McGee Onshore's 73 proposed NBU well locations and associated pipeline/access corridors in Township 10S, Range 22E resulted in the location of no cultural resources. Based on the findings, a determination of "no adverse impact" is recommended for the undertaking pursuant to Section 106, CFR 800.

REFERENCES CITED

Montgomery, J. A.
2007 Cultural Resource Management Report for Kerr-McGee Oil and Gas Onshore LP's Greater NBU Blocks in Township 10 South, Range 22 East, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-07-MQ-1438bsp.

Patterson, J. J., J. Fritz, K. Lower-Eskelson, R. Stash and A. Thomas
2008 NBU Class I Existing Data Review for Kerr-McGee Oil & Gas Onshore LP, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Stokes, W. L.
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

IPC #08-147

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Twin Wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2, T 10 S, R 22 E)

Archy Bench
Topographic Quadrangle
Uintah County, Utah

July 25, 2008

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E) was conducted by Stephen D. Sandau Jason Klimek and Arica Scheetz on July 22 and 23, 2008. The reconnaissance survey was conducted under the Utah BLM Paleontological Resources Use Permit #UT08-006C and Utah Paleontological Investigations Permit #07-356. This survey to locate, identify, and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321.et. Seq., P.L. 91-190);
2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579);
3) The National Historic Preservation Act.16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320; and
4) The Utah Geological Survey. S. C. A.: 63-73-1. (1-21) and U.C.A.: 53B-17-603

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- ***Class 1*** **– Very Low**. Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- ***Class 2*** **– Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial, and colluvial deposits etc…)
- ***Class 3*** **– Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
    - ***Class 3a*** **– Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.

- *Class 3b* – **Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.

- ***Class 4* – High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
  - *Class 4a* – Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - *Class 4b* – Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- ***Class 5* – Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
  - *Class 5a* - Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - *Class 5b* - Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), in and slightly northeast of Sand Wash, south of Coyote Wash and on the East Bench, just 16 miles south and east of Ouray, Utah, and 12-16 miles west of Bonanza, Utah. The project area can be found on the Archy Bench 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt, and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint, and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleo-magnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #922-32AT

The proposed twin is located on the existing well "NBU #190" in the NE/NE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located on a colluvium-covered hill derived from underlying sandstones which outcrop along the perimeter. No fossils were found.

NBU #922-32IT

The proposed twin is located on the existing well "NBU #282" in the NE/SE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located on a colluvium-covered hill of inter-bedded brown/tan sandstones.
No fossils were found.

NBU #922-32MT
The proposed twin is located on the existing well "NBU #281" in the SW/SW quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located among hills of inter-bedded tan sandstones and variegated green siltstone.
No fossils were found.

NBU #922-32OIT
The proposed twin is located on the existing well "NBU #404" in the SW/SE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located among hills of inter-bedded gray sandstones and variegated mudstones. No fossils were found.

NBU #922-35IT
The proposed twin is located on the existing well "CIGE #118" in the NE/SE quarter-quarter section of Sec. 35, T 9 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones which outcrop along the perimeter. No fossils were found.

NBU #922-36NT
The proposed twin is located on a previously existing well "CIGE #147" in the SE/SW quarter-quarter section of Sec. 36, T 9 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

NBU #1022-2JIT (multi-well also included: 2J25, 2J3S & 2O2S)
The proposed twin is located on the existing well "CIGE #10" in the NW/SE quarter-quarter section of Sec. 2, T 10 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

NBU #1022-2A2T (multi-well also included: 2B2S, 2A3S & 2A4S)
The proposed twin is located on the existing well "CIGE #67A" in the NE/NE quarter-quarter section of Sec. 2, T 10 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
"NBU #922-32AT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located on a colluvium-covered hill derived from underlying sandstones which outcrop along the perimeter.	No fossils were found. **Class 3a**
"NBU #922-32IT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located on a colluvium-covered hill of inter-bedded brown/tan sandstones.	No fossils were found. **Class 3a**
"NBU #922-32MT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located among hills of inter-bedded tan sandstones and variegated green siltstone.	No fossils were found. **Class 3a**
"NBU #922-32OIT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located among hills of inter-bedded gray sandstones and variegated mudstones.	No fossils were found. **Class 3a**
"NBU #922-35IT" (Sec. 35, T 9 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones which outcrop along the perimeter.	No fossils were found. **Class 3a**
"NBU #922-36NT" (Sec. 36, T 9 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found **Class 3a**
"NBU #1022-2A2T" (Sec. 2, T 10 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found. **Class 3a**
"NBU #1022-2JIT" (Sec. 2, T 10 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found. **Class 3a**

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E). The twin wells covered in this report showed no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, Operator (Lease Holder) will report all occurrences of paleontological resources discovered to a geologist with the Vernal Field Office of the BLM and the Office of the State Paleontologist. The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM and State as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under 43 CFR 3802 and 3809, and penalties possible for the collection of vertebrate fossils are under 43 CFR 8365.1-5.

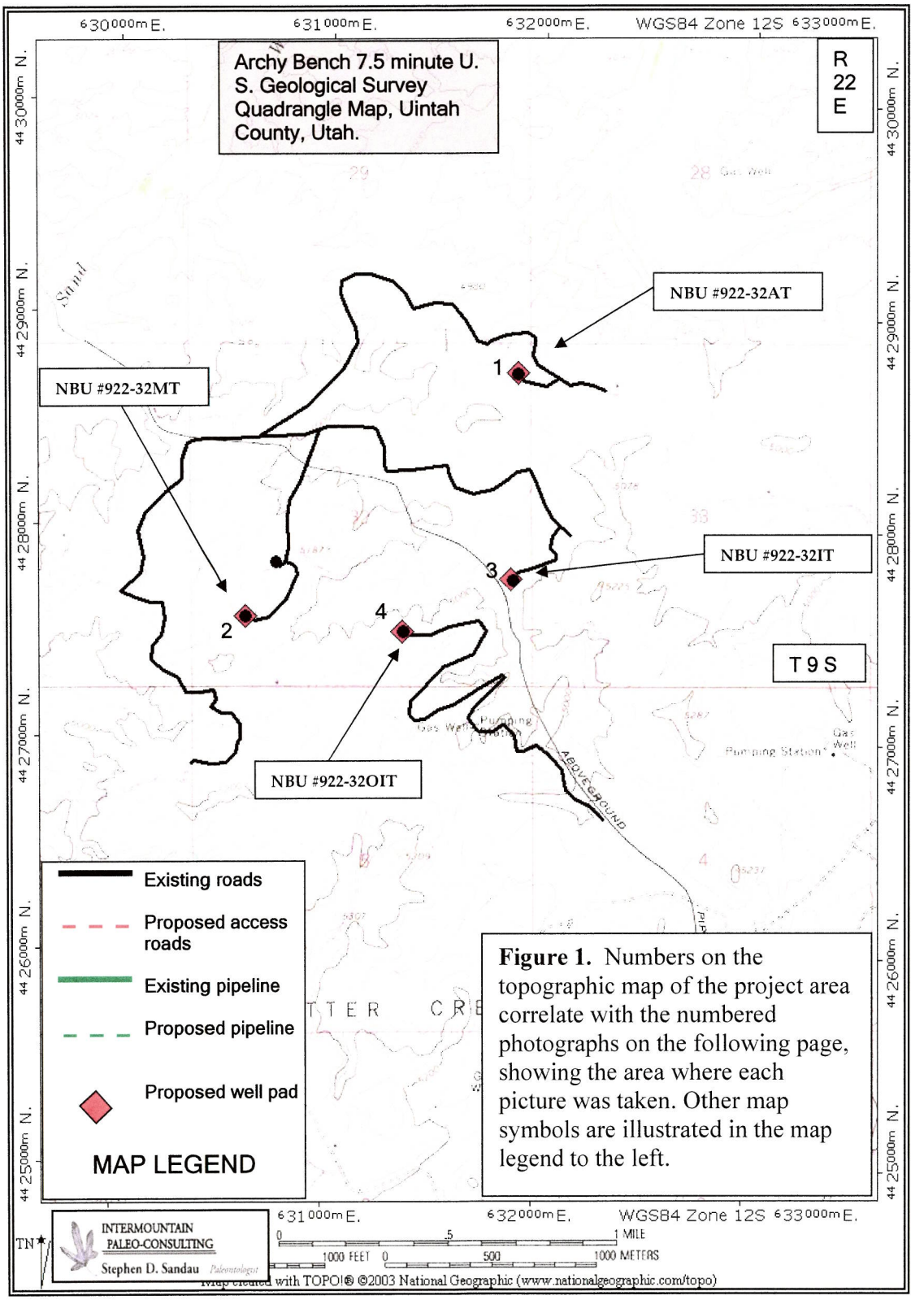
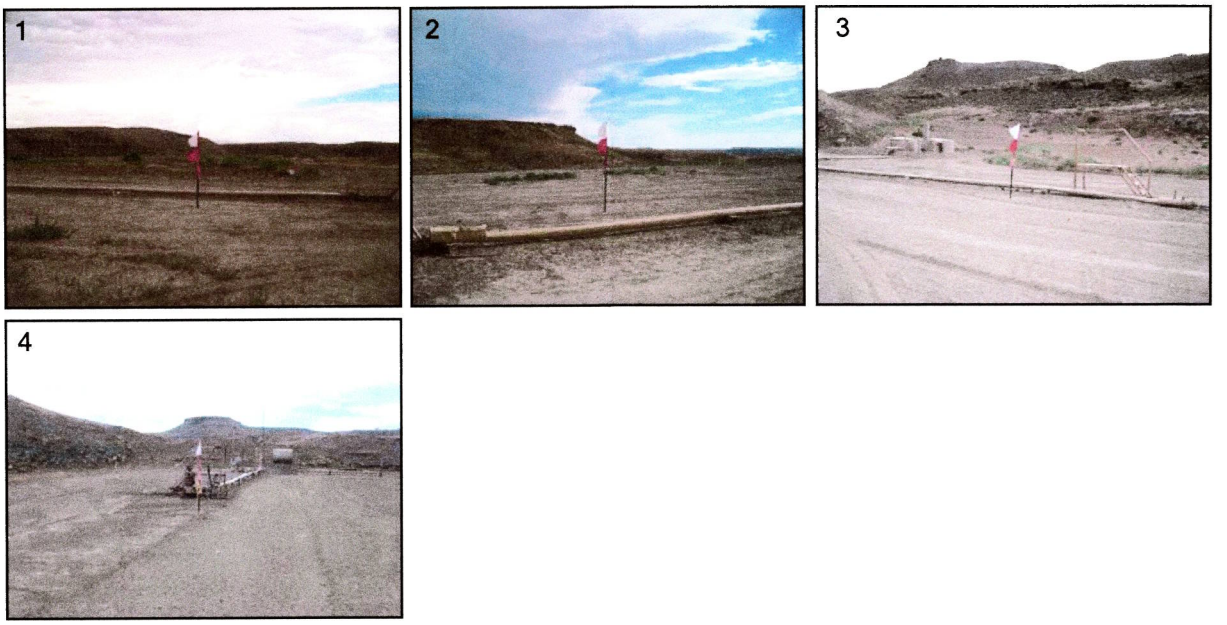


Figure 1. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 1. *continued. . .*



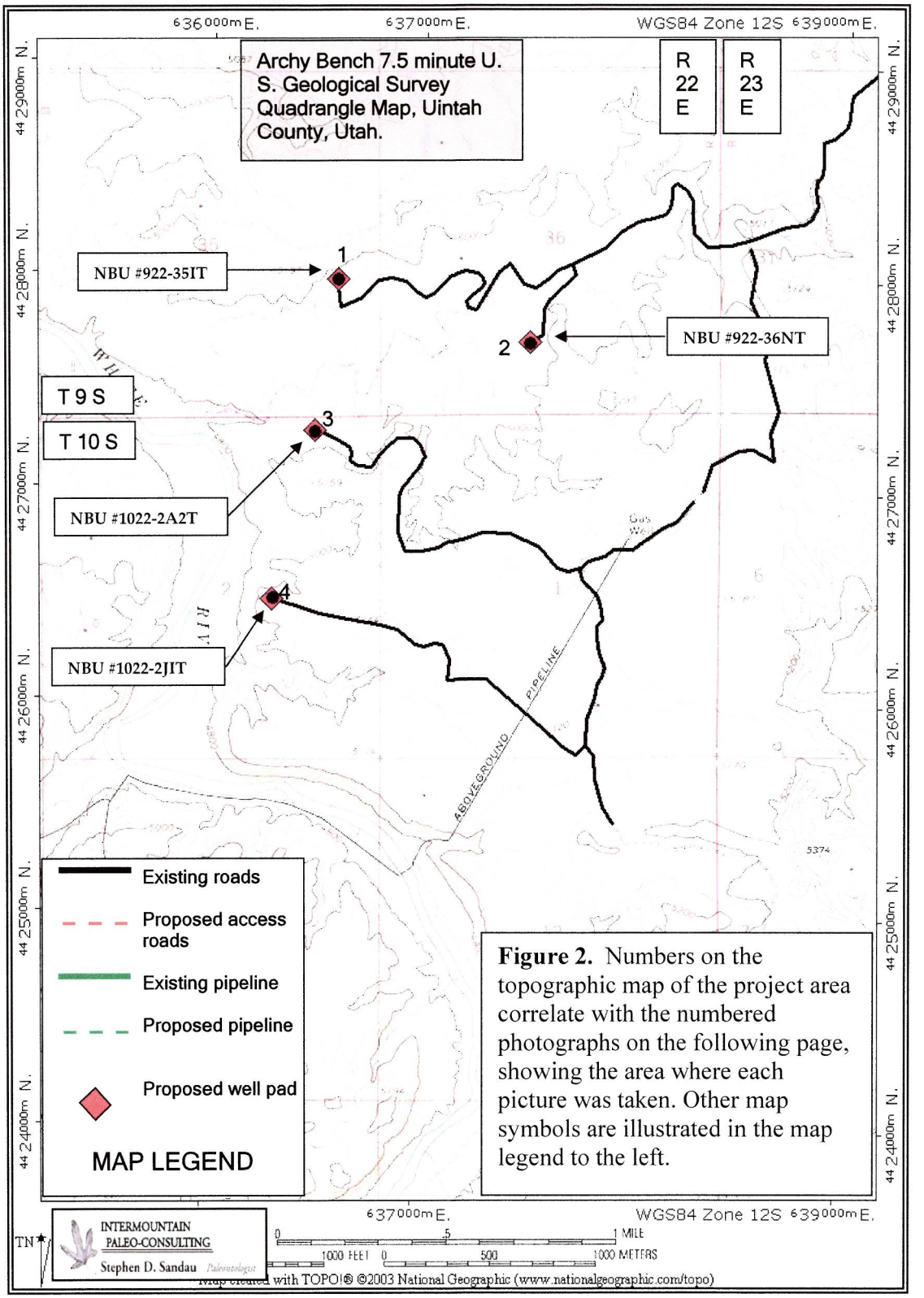
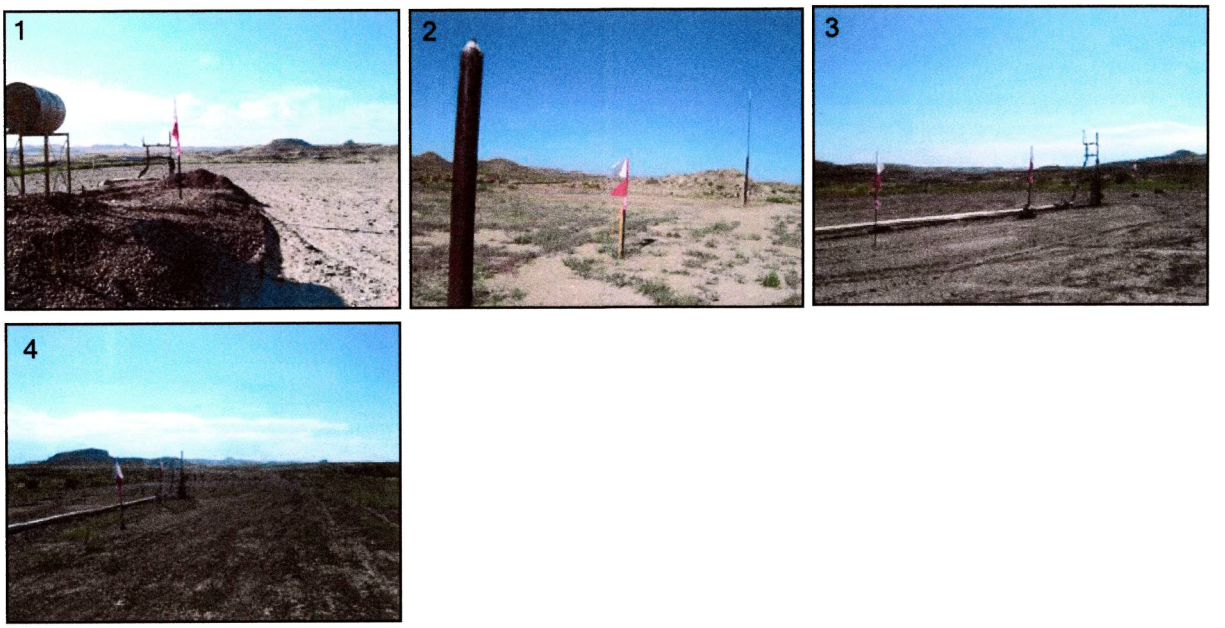


Figure 2. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 2. *continued. . .*



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API Number: 4304750217

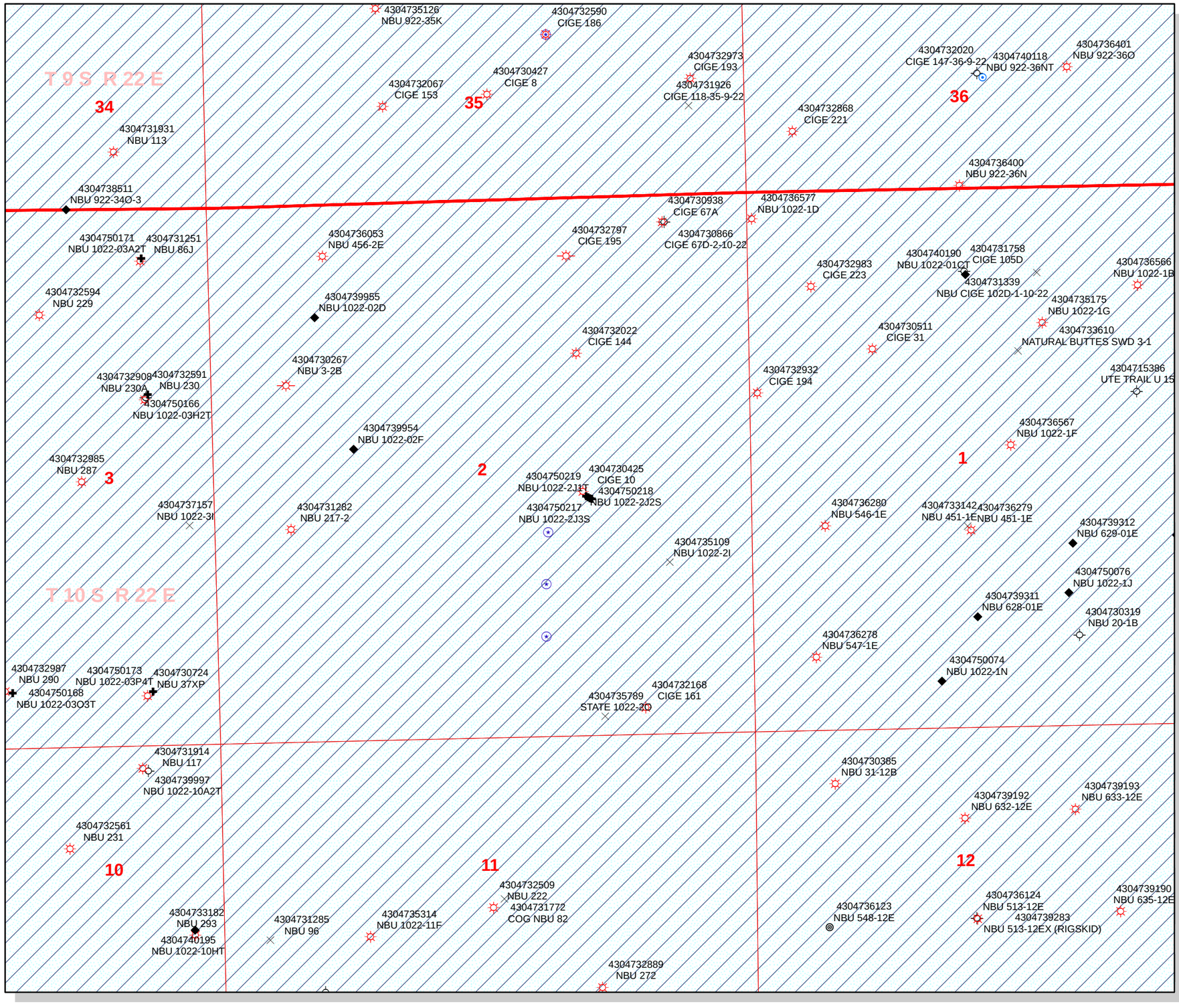
Well Name: NBU 1022-2J3S

Township 10.0 S Range 22.0 E Section 2

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason



Units

STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERMAL
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS
- ACTIVE
- COMBINED
- Sections
- Township

Wells Query Events
- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS

1,300 650 0 1,300 Feet

1:12,000

'APIWellNo:43047502170000'

'APIWellNo:43047502170000'

Kerr-McGee Oil & Gas Onshore LP
1999 Broadway, Suite 3700
Denver, CO 80205

November 3, 2008

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

1143

Re: Directional Drilling R649-3-11
NBU 1022-2J3S
T10S R22E
Section 2: NWSE
NWSE 2362' FSL, 1612' FEL (surface)
NWSE 1525' FSL, 2050' FEL (bottom hole)
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-2J3S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman

RECEIVED
NOV 10 2008
DIV. OF OIL, GAS & MINING

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

November 12, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50212	NBU 1022-11F4S	Sec 11 T10S R22E 2571 FSL 2215 FWL BHL Sec 11 T10S R22E 2615 FNL 2540 FWL
43-047-50213	NBU 1022-11J3S	Sec 11 T10S R22E 2551 FSL 2212 FWL BHL Sec 11 T10S R22E 1600 FSL 2340 FEL
43-047-50214	NBU 1022-11K2S	Sec 11 T10S R22E 2512 FSL 2206 FWL BHL Sec 11 T10S R22E 2230 FSL 1690 FWL
43-047-50215	NBU 1022-11K1T	Sec 11 T10S R22E 2531 FSL 2209 FWL
43-047-50216	NBU 1022-2O2S	Sec 02 T10S R22E 2354 FSL 1593 FEL BHL Sec 02 T10S R22E 1010 FSL 2055 FEL
43-047-50217	NBU 1022-2J3S	Sec 02 T10S R22E 2362 FSL 1612 FEL BHL Sec 02 T10S R22E 1525 FSL 2050 FEL
43-047-50218	NBU 1022-2J2S	Sec 02 T10S R22E 2377 FSL 1648 FEL BHL Sec 02 T10S R22E 2035 FSL 2025 FEL
43-047-50219	NBU 1022-2J1T	Sec 02 T10S R22E 2370 FSL 1630 FEL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-50220 NBU 1022-11M1S Sec 11 T10S R22E 1750 FSL 1885 FWL
BHL Sec 11 T10S R22E 1035 FSL 0850 FWL

43-047-50221 NBU 1022-11L2S Sec 11 T10S R22E 1798 FSL 1921 FWL
BHL Sec 11 T10S R22E 2495 FSL 0080 FWL

43-047-50222 NBU 1022-11K3S Sec 11 T10S R22E 1766 FSL 1897 FWL
BHL Sec 11 T10S R22E 1655 FSL 1735 FWL

43-047-50223 NBU 1022-11L3S Sec 11 T10S R22E 1782 FSL 1909 FWL
BHL Sec 11 T10S R22E 1850 FSL 0040 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:11-12-08

From: Jim Davis
To: Bonner, Ed; Mason, Diana
Date: 12/16/2008 10:30 AM
Subject: KMG well approvals (4 on one pad)

CC: Garrison, LaVonne

The following wells have been approved by SITLA including arch and paleo clearance.

4304750216	NBU 1022-2O2S	Kerr-McGee Oil & Gas	630	Natural Buttes	NWSE	2	100S 220E
4304750217	NBU 1022-2J3S	Kerr-McGee Oil & Gas	630	Natural Buttes	NWSE	2	100S 220E
4304750218	NBU 1022-2J2S	Kerr-McGee Oil & Gas	630	Natural Buttes	NWSE	2	100S 220E
4304750219	NBU 1022-2J1T	Kerr-McGee Oil & Gas	630	Natural Buttes	NWSE	2	100S 220E

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1022-2J3S 43047502170000

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1022-2J3S 43047502170(			
String	Surf	Prod		
Casing Size(")	9.625	4.500		
Setting Depth (TVD)	1900	8706		
Previous Shoe Setting Depth (TVD)	60	1900		
Max Mud Weight (ppg)	8.4	12.0		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7780		
Operators Max Anticipated Pressure (psi)	5270	11.6		

Calculations	Surf String	9.625	"
Max BPH (psi)	.052*Setting Depth*MW=	830	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	602	NO Air Drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	412	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	425	NO
Required Casing/BOPE Test Pressure=		1900	psi
*Max Pressure Allowed @ Previous Casing Shoe=		60	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BPH (psi)	.052*Setting Depth*MW=	5433	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4388	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3518	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3936	NO
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1900	psi *Assumes 1psi/ft frac gradient

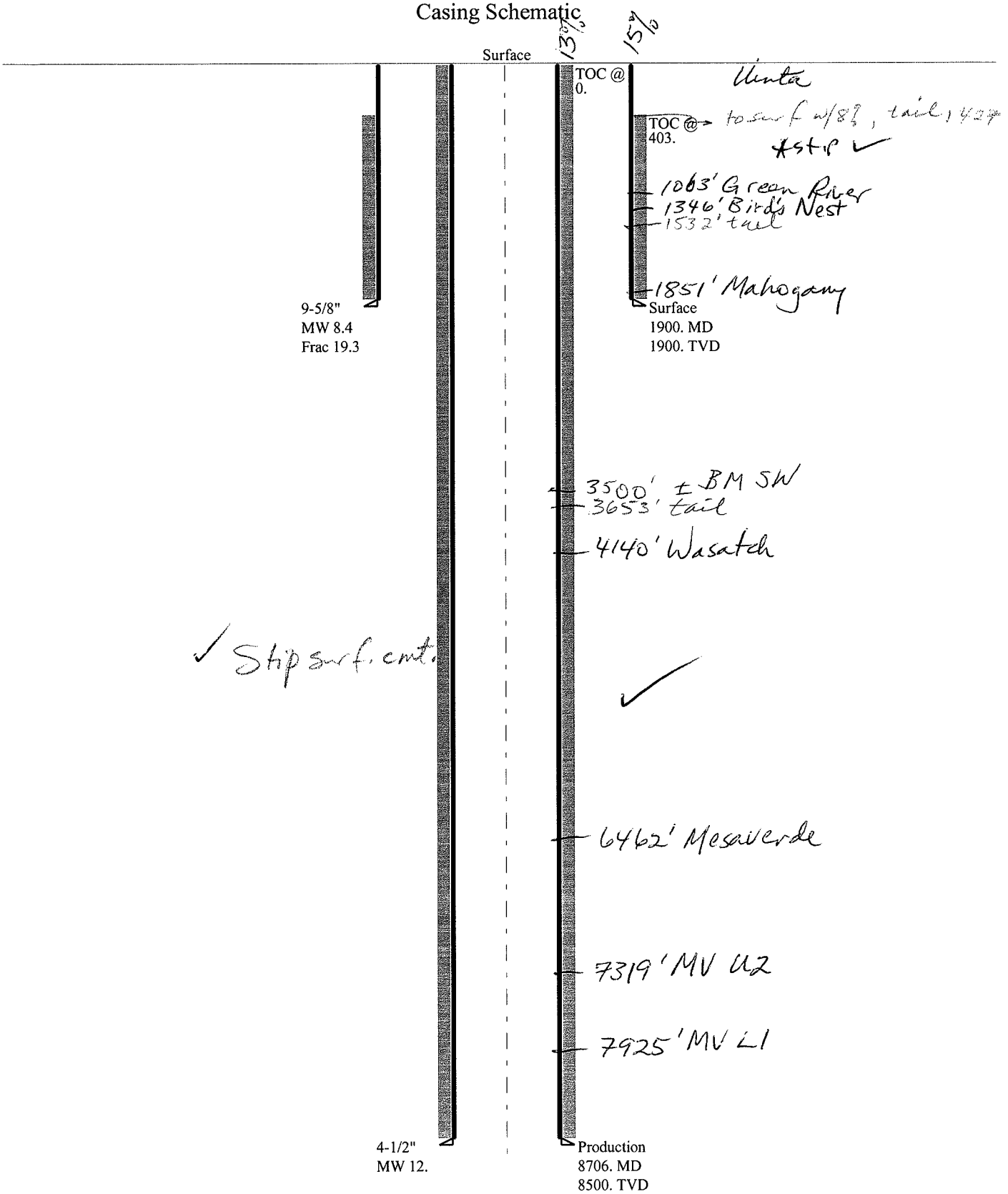
Calculations	String		"
Max BPH (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BPH (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

'APIWellNo:43047502170000'

43047502170000 NBU 1022-2J3S

Casing Schematic



'APIWellNo:43047502170000'

Well name:	**43047502170000 NBU 1022-2J3S**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Surface
Project ID:	43-047-50217
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,672 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,900 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 1,664 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 102 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 403 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,500 ft
Next mud weight: 12.000 ppg
Next setting BHP: 5,299 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 1,900 ft
Injection pressure: 1,900 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	1900	9.625	36.00	J-55	LT&C	1900	1900	8.796	15537

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	829	2020	2.436	1900	3520	1.85	68.4	453	6.62 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: January 28,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 1900 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

'APIWellNo:43047502170000'

Well name:	**43047502170000 NBU 1022-2J3S**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Production
Project ID:	43-047-50217
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 12.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,429 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,299 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 7,181 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 194 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: Surface

Directional Info - Build & Drop
Kick-off point 2100 ft
Departure at shoe: 944 ft
Maximum dogleg: 3 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	8706	4.5	11.60	I-80	LT&C	8500	8706	3.875	114919

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5299	6360	1.200	5299	7780	1.47	98.6	212	2.15 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: January 28,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 8500 ft, a mud weight of 12 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.								
Well Name	NBU 1022-2J3S								
API Number	43047502170000			**APD No**	1163	**Field/Unit**		NATURAL BUTTES	
Location: 1/4,1/4	NWSE	**Sec** 2	**Tw** 10.0S	**Rng** 22.0E	2362	FSL	1612	FEL	
GPS Coord (UTM)	636426 4426249			**Surface Owner**					

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Ramie Hoopes, Griz Oleen and Tony Kzneck (Kerr McGee), Pat Rainbolt (UDWR) and David Kay (Uintah Engineering and Land Surveying).

Regional/Local Setting & Topography

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 25 road miles following Utah State, Uintah County and oilfield development roads to the location.

The proposed pad encompasses the existing pad of the CIGE 10 gas well and will be enlarged in all directions except to the west. The location is near the end of a flat-topped ridge which runs in an east to west direction and ends west of the proposed pad at some steep ledged breaks. Swales exist to the south and east which becomes deep secondary canyons of the White River. The planned reserve pit is on the north side of the location and also extends to near the edge of a seep side-slope of a canyon. Pit corner C is embanked by 0.6 ' of fill but should be stable with the 15-foot wide outer embankment. The existing pad shows no stability problems and the site has no significant concerns, which would prohibit constructing an enlarged pad, drilling and operating the planned wells, and is the only suitable location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Surface Use Plan

Current Surface Use
Wildlfe Habitat
Existing Well Pad

New Road Miles	**Well Pad**	**Src Const Material**	**Surface Formation**
0	**Width** 335 **Length** 500	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Poorly vegetated with cheatgrass, black sagebrush, broom snakeweed, shadscale, rabbitbrush, pepper weed, halogeton, black sage and annuals.

Sheep, deer, antelope, coyote, and other small mammals and birds.

Soil Type and Characteristics

Shallow rocky sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? **Paleo Potental Observed?** N **Cultural Survey Run?** **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	35	1 Sensitivity Level

Characteristics / Requirements

The reserve pit is planned in an area of cut in the northwest corner of the location. Dimensions are 100' x 250' x 10' deep with 2' of freeboard. A 15' bench is provided on the outer sides. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 40 **Pit Underlayment Required?** Y

Other Observations / Comments

The reserve pit is planned in an area of cut in the northwest corner of the location. Dimensions are 100’ x 250’ x 10’ deep with 2’ of freeboard. A 15’ bench is provided on the outer sides. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock.

Floyd Bartlett	11/18/2008
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
1163	43047502170000	FILED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		**Surface Owner-APD**		
Well Name	NBU 1022-2J3S		**Unit**	NATURAL BUTTES	
Field	NATURAL BUTTES		**Type of Work**	DRILL	
Location	NWSE 2 10S 22E S 2362 FSL 1612 FEL		GPS Coord (UTM)	636382E	4426236N

Geologic Statement of Basis

Kerr McGee proposes to set 1,900' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,500'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 2. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill	12/13/2008
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 25 road miles following Utah State, Uintah County and oilfield development roads to the location.

The proposed pad encompasses the existing pad of the CIGE 10 gas well and will be enlarged in all directions except to the west. The location is near the end of a flat-topped ridge which runs in an east to west direction and ends west of the proposed pad at some steep ledged breaks. Swales exist to the south and east which becomes deep secondary canyons of the White River. The planned reserve pit is on the north side of the location and also extends to near the edge of a seep side-slope of a canyon. Pit corner C is embanked by 0.6 ' of fill but should be stable with the 15-foot wide outer embankment. The existing pad shows no stability problems and the site has no significant concerns, which would prohibit constructing an enlarged pad, drilling and operating the planned wells, and is the only suitable location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Pat Rainbolt of the Utah Division of Wildlife Resources also attended the pre-site. Mr. Rainbolt stated drilling and operating the wells at this location would significantly affect no wildlife values. He provided Jim Davis of SITLA and Ramie Hoopes of Kerr McGee a written wildlife evaluation and a copy of a recommended seed mix to be used for re-vegetating the disturbed area.

New cut-sheets (Figure #1) were prepared to provide adequate fill to enlarge the pad.

Floyd Bartlett	11/18/2008
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A double synthetic liner each with a minimum thickness of 20 mils and an appropriate thickness of felt sub-liner to cushion the liners shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/7/2008 **API NO. ASSIGNED:** 43047502170000

WELL NAME: NBU 1022-2J3S

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6226

CONTACT: Kevin McIntyre

PROPOSED LOCATION: NWSE 2 100S 220E **Permit Tech Review:** ☑

SURFACE: 2362 FSL 1612 FEL **Engineering Review:** ☑

BOTTOM: 1525 FSL 2050 FEL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 39.97719 **LONGITUDE:** -109.40288

UTM SURF EASTINGS: 636382.00 **NORTHINGS:** 4426236.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ST ML 22651 **PROPOSED FORMATION:** WSMVD

SURFACE OWNER: 3 - State **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** STATE/FEE - 22013542
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

LOCATION AND SITING:

- ☐ **R649-2-3.**

  Unit: NATURAL BUTTES
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

  Board Cause No: Cause 173-14

  Effective Date: 12/2/1999

  Siting: 460' fr u bdry & uncomm. tract
- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
3 - Commingling - ddoucet
5 - Statement of Basis - bhill
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason
25 - Surface Casing - hmacdonald

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: NBU 1022-2J3S
API Well Number: 43047502170000
Lease Number: ST ML 22651
Surface Owner: STATE
Approval Date: 2/5/2009

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P. , P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14 .

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:
In accordance with Cause No. 173-14, commingling the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to spudding the well - contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program - contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well - contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

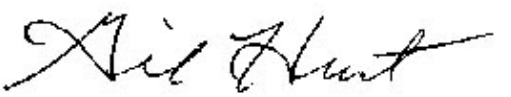
- Plugging and abandonment or significant plug back of this well - contact Dustin Doucet
- Any changes to the approved drilling plan - contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office
  (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office
  (801) 733-0983 home

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:



Gil Hunt
Associate Director, Oil & Gas

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **KERR-McGEE OIL & GAS ONSHORE, L.P.**

Well Name: **NBU 1022-2J3S**

Api No: **43-047-50217** Lease Type: **STATE**

Section **02** Township **10S** Range **22E** County **UINTAH**

Drilling Contractor **PETE MARTIN DRILING** RIG # **BUCKET**

SPUDDED:

Date **04/21/09**

Time **1:00 PM**

How **DRY**

Drilling will Commence:

Reported by **LEW WELDON**

Telephone # **(435) 828-7035**

Date **04/23/09** **Signed** **CHD**

API Well No: 43047502170000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6587 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 2 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/16/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP respectfully requests to change the surface casing for this well from 1,900' to 2,050'. Please see the attached drilling diagram for additional details. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: May 18, 2009

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 5/13/2009

RECEIVED May 13, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047502170000

Surface casing shall be cemented from setting depth back to surface.

Approved by the
Utah Division of
Oil, Gas and Mining

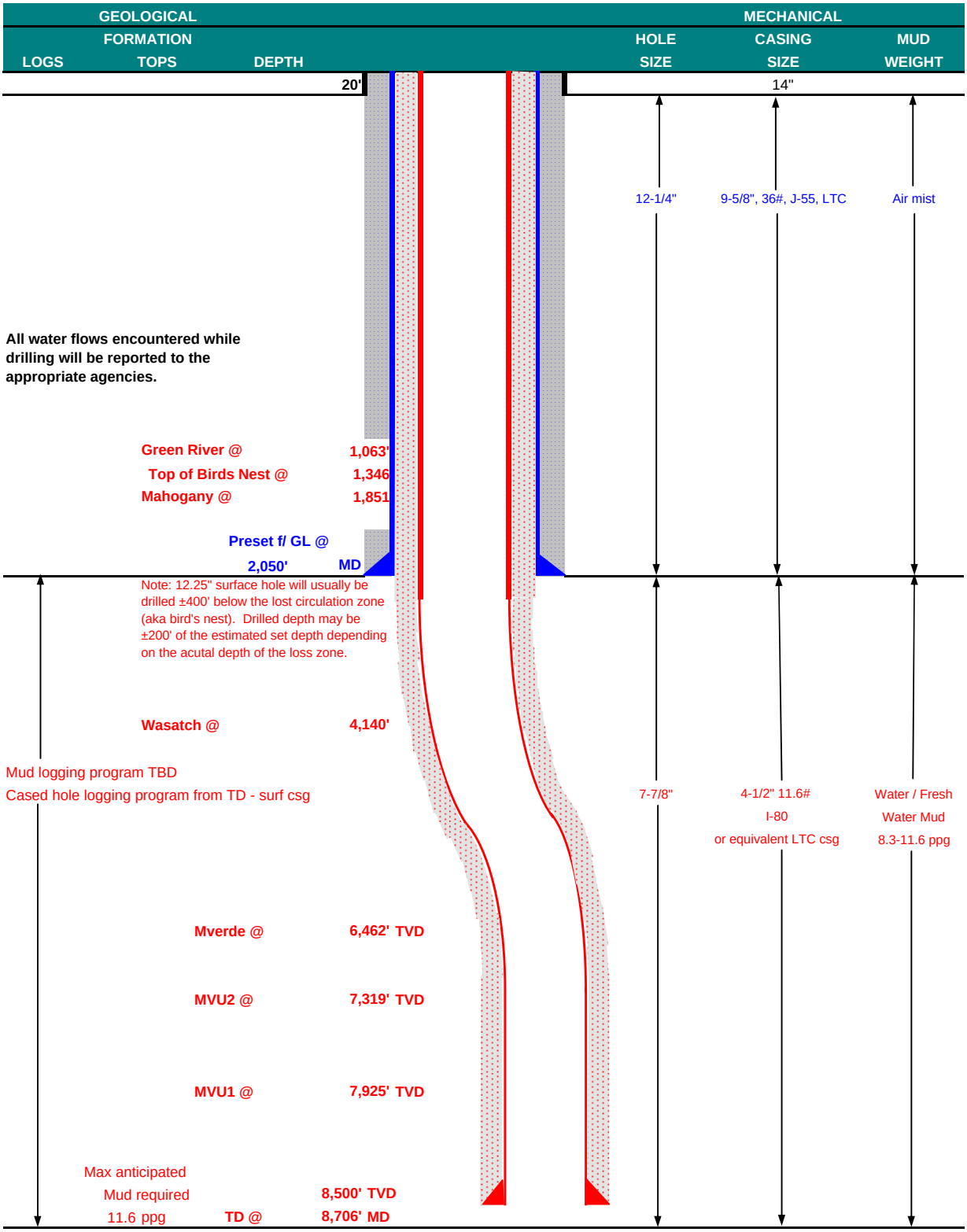
Date: May 18, 2009

By:

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	May 13, 2009		
WELL NAME	**NBU 1022-2J3S**			TD	8,500'	TVD	8,706' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	ELEVATION	5,040' GL KB 5,055'
SURFACE LOCATION	NW/4 SE/4	2,362' FSL	1,612' FEL	Sec 2	T 10S	R 22E	
	Latitude:	39.977214	Longitude:	-109.402739		NAD 27	
BTM HOLE LOCATION	NW/4 SE/4	1,525' FSL	2,050' FEL	Sec 2	T 10S	R 22E	
	Latitude:	39.974919	Longitude:	-109.404306		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), Tri-County Health Dept.						



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,050	36.00	J-55	LTC	1.06	2.11	7.81
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8,706	11.60	I-80	LTC	2.39	1.24	2.28

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.6 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,161 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 11.6 ppg) 0.59 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,031 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.25 pps Flocele + 3% salt BWOW				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,636'	Premium Lite II + 3% KCl + 0.25 pps	350	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,070'	50/50 Poz/G + 10% salt + 2% gel	1240	40%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Grant Schluender

DRILLING SUPERINTENDENT: _____ **DATE:** _____
John Merkel / Lovel Young

API Well No: 43047502170000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6587 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 2 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 6/4/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2060' TO 8882' ON 06/02/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/630 SX PREM LITE II @12.5 PPG 2.97 YIELD. TAILED CMT W/1100 SX 50/50 POZ @14.3 PPG 1.31 YIELD. WASH LINES DROP PLUG & DISPLACE W/137 BBLS WATER W/CLAYFIX @.. GAL/BBL ALDACIDE G TO BUMP PLUG WITH 3200 PSI FINAL LIFT PSI 2700 PSI STARTED LOSING PARTIAL RETURNS AFTER DROPPING THE PLUG AND LOST FILL RETURNS 13 BBLS PRIOR TO BUMPING HAD NO CEMENT OR WATER TO SURFACE RELEASE PSI FLOATS HELD. LAND HANGER NIPPLE DOWN BOP INSTALL NIGHT CAP CLEAN PITS. RELEASED ENSIGN RIG 145 ON 06/03/2009 AT 2100 HRS.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

June 04, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Upchego	435 781-7024	Regulatory Analyst
SIGNATURE N/A		**DATE** 6/4/2009

RECEIVED June 04, 2009

API Well No: 43047502170000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 2 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 9/20/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 09/20/2009 AT 10:00 A.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
September 22, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/22/2009

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 4/22/2009	End Date:
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/24/2009	21:30 - 0:00	2.50	DRLSUR	02	A	P		DRILL 40'-270' WITH AIR AND AIR HAMMER
4/25/2009	0:00 - 4:00	4.00	DRLSUR	02	A	P		DRILL 270'- 530', W/ AIR MIST AND AIR HAMMER
	4:00 - 4:30	0.50	DRLSUR	10	B	P		SURVEY MULTISHOT WIRELINE, 500'= .4 DEG 256.3 AZI
	4:30 - 14:00	9.50	DRLSUR	02	A	P		DRILL 530'- 1080', W/ AIR MIST AND AIR HAMMER
	14:00 - 14:30	0.50	DRLSUR	10	B	P		SURVEY MULTISHOT WIRELINE 1050'= .4 DEG 324.5 AZI
	14:30 - 22:00	7.50	DRLSUR	02	A	P		DRILL 1080'- 1320'. W/ AIR MIST.
	22:00 - 22:30	0.50	DRLSUR	10	B	P		SURVEY MULTISHOT WIRELINE 1290'= .4 DEG 138.8 AZI
	22:30 - 0:00	1.50	DRLSUR	06	A	P		TRIP FOR TRICONE BIT.
4/26/2009	0:00 - 2:00	2.00	DRLSUR	06	A	P		TRIP FOR TRICONE BIT.
	2:00 - 16:30	14.50	DRLSUR	02	A	P		DRILL 1320'- 1590' WITH TRICONE, WATER ZONE 1330' AND 1515'. CIRC W/ SKID PUMP, NO RETURNS. CLEAN HOLE W/ BOOSTER
	16:30 - 17:00	0.50	DRLSUR	10	A	P		SURVEY MULTI SHOT WIRELINE, 1500' .4 DEG AZI 205.6 SEPERATION FACTOR 2.569
	17:00 - 0:00	7.00	DRLSUR	02	A	P		DRILL 1590'- 1740' WITH TRICONE, CIRC W/ SKID PUMP CLEAN HOLE W/ BOOSTER
4/27/2009	0:00 - 10:00	10.00	DRLSUR	02	A	P		RIG DRILLING AHEAD W/ FLUID NO RETURNS 1800'
	10:00 - 10:30	0.50	DRLSUR	10	A	P		SURVEY .5 DEG. 201 AZI
	10:30 - 23:30	13.00	DRLSUR	02	A	P		RIG DRILLED TO 2060' T/D CONDITION HOLE 1 HR
	23:30 - 0:00	0.50	DRLSUR	10	A	P		SURVEY .7 DEG 178.8 AZI SEP. FACTOR 2.086
4/28/2009	0:00 - 3:00	3.00	DRLSUR	06	D	P		TRIP DP OUT OF HOLE
	3:00 - 5:00	2.00	DRLSUR	12	C	P		RUN 2020' OF 9 5/8 36# J-55 CSG FLOAT COLLAR @ 1976.8' RIG DOWN AIR RIG
	5:00 - 6:30	1.50	DRLSUR	12	E	P		CEMENT SURFACE W/ 350 SKS @ 15.8# 1.15 5.0 GAL/SK NO RETURNS THRU OUT JOB 130 PSI LIFT LAND PLUG W/800 PSI FLOATS DID NOT HOLD SHUT IN WELL
	6:30 - 7:00	0.50	DRLSUR	12	E	P		1ST TOP JOB 100 SKS DOWN BS WOC
	7:00 - 10:00	3.00	DRLSUR	12	E	P		2ND TOP JOB 175 SKS DOWN BS WOC
	10:00 - 12:00	2.00	DRLSUR	12	E	P		3RD TOP JOB 100 SKS DOWN BS WOC
	12:00 - 14:00	2.00	DRLSUR	12	E	P		4TH TOP JOB 175 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	14:00 - 14:00	0.00	DRLSUR					NO VISIBLE LEAKS PIT 20% FULL WORT
5/27/2009	0:00 - 1:30	1.50	DRLPRO	01	C	P		ND BOP, INSTALL NIGHTCAP
	1:30 - 3:30	2.00	DRLPRO	01	C	P		SKID RIG
	3:30 - 6:30	3.00	DRLPRO	14	A	P		NU BOP, FLARE LINE, FLOWLINE
	6:30 - 9:30	3.00	DRLPRO	21	E	Z		ADAPTOR SEAL WELLHEAD TO BOP LEAKING, WAIT ON NEW SEALS FROM CAMERON. CHANGE SEALS AND TEST SAME.
	9:30 - 13:30	4.00	DRLPRO	15	A	P		TEST BLIND RAMS, PIPE RAMS, FLOOR VALVES, CHOKE MANIFOLD AND ALL RELATED VALVES TO 250 AND 5000 PSI FOR 5 AND 10 MINUTES RESPECTFULLY. TEST CASING TO 1500 PSI FOR 30 MINUTES. INSTALL WEAR BUSHING.
	13:30 - 14:00	0.50	DRLPRO	11	E	P		PERFORM PRE JOB RIG INSPECTION.
	14:00 - 17:00	3.00	DRLPRO	06	A	P		PICK UP BHA. TRIP IN HOLE WITH SAME TO 900'.
	17:00 - 19:00	2.00	DRLPRO	08	A	Z		WORK ON IRON DERRICKMAN, WOULD NOT ROTATE.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 4/22/2009	End Date:
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	19:00 - 19:30	0.50	DRLPRO	14	B	P		INSTALL ROTATING HEAD.
	19:30 - 20:30	1.00	DRLPRO	08	A	Z		WORK ON IRON DERRICKMAN. REROUTED THE WIRE CONTROLLING THE PROXIMITY SWITCH FROM THE WIRE BUNDLE TO GET AWAY FROM INTERFERENCE.
	20:30 - 22:00	1.50	DRLPRO	06	A	P		FINISH IN HOLE.
	22:00 - 23:30	1.50	DRLPRO	02	F	P		DRILL SHOE TRACK, WASH OPEN HOLE TO 2073'
	23:30 - 0:00	0.50	DRLPRO	02	B	P		DRILL 2073'-2130' (57') 8/10K WOB, 105 BIT RPM.
5/28/2009	0:00 - 3:30	3.50	DRLPRO	02	D	P		DRILL/SLIDE 2130'-2318' (188') 53.7'/HR. 8-25K WOB, BIT RPM 119, SLIDE 18%, ROT 82%. GAS 180-2400 UNITS.NO FLARE
	3:30 - 4:00	0.50	DRLPRO	07	A	P		RIG SERVICE, CHANGE DIES IN GRABBER BOX.
	4:00 - 4:30	0.50	DRLPRO	08	A	Z		REPAIR HOOK LOAD CALIBRATION.
	4:30 - 12:00	7.50	DRLPRO	02	D	P		DRILL/SLIDE 2318'-2780' (462') 61.6'/HR. 8-25K WOB, 119 BIT RPM. 499 GPM, SLIDE 18-58% (6' TO 18' SLIDES FOR DIRECTIONAL CONTROL),
	12:00 - 12:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	12:30 - 0:00	11.50	DRLPRO	02	D	P		DRILL/SLIDE 2780'-3616' (836') 72.7'/HR. 8-25K WOB, AVG 19-20 WOB ROT. 119 BIT RPM. 499 GPM, DIFF 200-300 PSI, SLIDE UP TO 32-36% (30' TO 36'/100') SLIDES FOR DIRECTIONAL CONTROL),
5/29/2009	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRILL/SLIDE 3616'-4740' (1124') 83.2'/HR. 8-25K WOB, AVG 18-20 WOB, 119 BIT RPM. 499 GPM, DIFF 200-380 PSI, SLIDE 10% TO 17% IN THE DROP SECTION TO CONTROL ANGLE AND DOG LEGS. (SLIDES FOR DIRECTIONAL CONTROL),
	13:30 - 14:00	0.50	DRLPRO	07	A	P		SERVICE RIG
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL/SLIDE 4740'-5487' (747')74.7'/HR. 8-30K WOB, AVG 18-20 WOB, 119 BIT RPM. 499 GPM, PP 1550-1770, DIFF 200-300 PSI, SLIDE 20% TO 35% IN THE DROP SECTION TO CONTROL ANGLE.
5/30/2009	0:00 - 11:30	11.50	DRLPRO	02	D	P		DRILL/SLIDE 5487'-6547' (1060') 92.17'/HR. 8-30K WOB, AVG 16-18 WOB, 119 BIT RPM. 499 GPM, PP 2200-2450, DIFF 200-300 PSI, SLIDE 5038'-45'(7'), 5060-72'(12'), 5111'-36' (25'), 5145'-63' (18'), 5286'-98' (12'), 6050-74' (24').
	11:30 - 12:00	0.50	DRLPRO	07	A	P		SERVICE RIG, FUNCTION TEST HCR
	12:00 - 18:00	6.00	DRLPRO	02	D	P		DRILL/SLIDE 6547'-6930 (383') 47.8'/HR. '/HR. 8-40K WOB, AVG 16-18 WOB ROT, 119 BIT RPM. 499 GPM, PP 2200-2450, DIFF 200-300 PSI,
	18:00 - 19:00	1.00	DRLPRO	02	D	P		SLIDE 7930'-6942' (12') 38-42K WOB
	19:00 - 19:30	0.50	DRLPRO	02	D	P		ROT. 6942'-6958' (16') 32'/HR. 16-18K WOB, 119 BIT RPM, 200 DIFF.
	19:30 - 20:00	0.50	DRLPRO	02	D	P		SLIDE 6958'-6965' (7') 38-42K WOB
	20:00 - 21:00	1.00	DRLPRO	02	D	P		ROT. 6965'-7016' (51') 51'/HR. 16-18K WOB, 119 BIT RPM, 200 DIFF.
	21:00 - 23:00	2.00	DRLPRO	02	D	P		SLIDE 7016'-7039' (23') 11.5'/HR. 38-45K WOB. MIXING NUT PLUG TO AID SLIDE.
	23:00 - 23:30	0.50	DRLPRO	02	D	P		ROT. 7039'-7060' (21') 16-18K WOB, 119 BIT RPM, 200 DIFF.
	23:30 - 0:00	0.50	DRLPRO	02	D	P		SLIDE 7060'-7064' (4') 8'/HR.
5/31/2009	0:00 - 1:30	1.50	DRLPRO	02	D	P		Slide 7064'-7080' (16') TFO "0" 38-45k WOB
	1:30 - 7:00	5.50	DRLPRO	02	D	P		ROT 7080'-7480' 6 (400') 66.6'/HR., UNABLE TO PICK UP WITH OUT ROTATING STRING.
	7:00 - 7:30	0.50	DRLPRO	02	D	P		SLIDE 7480'-7505' (25') TFO "0" 38-45K WOB,
	7:30 - 8:30	1.00	DRLPRO	02	D	P		ROATATE. 7505'-7572' (67') 67'/HR. 16-18K WOB.

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 4/22/2009	End Date:
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:30 - 9:00	0.50	DRLPRO	02	D	P		SLIDE 7572'-7577' (5') STACKING OUT
	9:00 - 12:30	3.50	DRLPRO	02	D	P		ROTATE 7577'-7853' (276') 83.64'/HR.. 16-18K WOB, 119 RPM.ROTATING OUT OR HOLE TO MAKE CONN. PULLNG TO 270K (100k OVER STRING) ROTATES OUT WITH 2210-220K..SHOW GAS TO 2900 UNITS, MUD CUT FROM 11.0 TO 10.5 P PG. NO FLARE. PP 2350-2700, DIFF 200-350.
	12:30 - 13:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	13:00 - 13:30	0.50	DRLPRO	05	C	P		HELD SAFETY MEETING, CIRCULATE BU, HELD SAFETY MEETING, PUMP PILL.
	13:30 - 18:30	5.00	DRLPRO	06	E	P		POOH TO THE SHOE. ROTATED THE FIRST 6 STANDS OUT OF TIGHT HOLE THEN PIPE CAME WITH OUT ROTATING WITH 280K PULL. PIPE THEN TRIPPED FROM 220-270 AFTER THAT. FINISH OUT OF HOLE TO THE CASING SHOE.
	18:30 - 21:00	2.50	DRLPRO	09	A	P		HELD JSA, SLIP AND CUT 85' DRILL LINE
	21:00 - 0:00	3.00	DRLPRO	06	E	P		TIH
6/1/2009	0:00 - 2:30	2.50	DRLPRO	06	E	P		FINISH IN HOLE. WASH 90' TO BOTTOM. TRIP GAS 6700 UNITS, 15'-20' FLARE, MUD CUT TO 8.9 PPG FROM 11.1
	2:30 - 4:00	1.50	DRLPRO	02	D	P		DRILL 7853'-7945' (92') 61.3'/HR. 16-18K WOB, 114 BIT RPM , PUMP PSI 2550=-2850, 200 TO 300 DIFF. MW 11.5 42 VIS,
	4:00 - 5:00	1.00	DRLPRO	02	D	P		SLIDE 7945'-7954' (9') TFO "0" 38-45K WOB. MW 11.9, VIS 42
	5:00 - 6:30	1.50	DRLPRO	02	D	P		DRILL 7954'-8012' (58') 38.67'/HR. 16-18K WOB, 114 BIT RPM , PUMP PSI 2550=-2850, 200 TO 300 DIFF. MW 12.1 43 VIS,
	6:30 - 8:30	2.00	DRLPRO	02	D	P		SLIDE 8012'-8029' (17') 8.5'/HR. 38-48K WOB, MW 12.1, VIS 43
	8:30 - 13:00	4.50	DRLPRO	02	D	P		DRO;; 8029'-8230' (201') 44.67'/HR. 16-18K WOB, 114 BIT RPM , PUMP PSI 2550=-2850, 200 TO 300 DIFF. MW 12.1 43 VIS, GAS SHOWS TO 3700 UNITS, 5'-10' FLARE.
	13:00 - 13:30	0.50	DRLPRO	07	A	P		SERVICE RIG, FUNTION TEST ANNULAR.
	13:30 - 0:00	10.50	DRLPRO	02	D	P		DRILL 8230'-8740' (510') 48.5'/HR. 18-22K WOB, 114 BIT RPM, PUMP PSI 2750-2850, 200-300 DIFF. GAS SHOWS TO 2100 UNITS, 5' FLARE
6/2/2009	0:00 - 4:00	4.00	DRLPRO	02	D	P		DRILL 8740'-8882' (142') 35.5'/HR. 18-22K WOB, 114 BIT RPM, PP2750-2950. DIFF 200 PSI. MW 12.2, VIS 42
	4:00 - 5:00	1.00	DRLPRO	05	C	P		CIRCULATE BOTTOMS UP. MW 12.3, VIS 46, BGG 300 UNITS.
	5:00 - 12:00	7.00	DRLPRO	06	E	P		WIPER TRIP 31 STANDS TO 5984', PUMP AND ROTATE OUT TO 8296' PULLS TO 270K, ROTATE ONLY TO 7340' PULL 199-220, PULL ONLY TO 5984' 198-245K, TIH, WASH 2 STANDS TO BOTTOM, NO FILL.
	12:00 - 14:00	2.00	DRLPRO	05	C	P		CIRCULATE BOTTOMS UP, TRIP GAS 3970 UNITS, 5' - 10' FLARE. MW 12.5, VIS 46
	14:00 - 21:00	7.00	DRLPRO	06	B	P		POOH STANDING BACK. LD DIRECTIONAL TOOLS.
	21:00 - 0:00	3.00	DRLPRO	11	D	P		HELD SAFETY MEETING, RU AND START RUNNING TRIPLE COMBO LOG FROM 8874' LOGGERS TD.
6/3/2009	0:00 - 3:00	3.00	DRLPRO	11	D	P		FINISH RUNNING TRIPLE COMBO TO CASING SHOE, RUN GR TO SURFACE.
	3:00 - 4:00	1.00	DRLPRO	14	B	P		PULL WEAR BUSHING

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 4/22/2009	End Date:
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	4:00 - 12:30	8.50	DRLPRO	12	C	P		HELD SAFETY MEETING, RU WESTATES CASING CREW. RUN CSG. AS FOLLOWS: FLOAT SHOE, 1 JT. CSG. FLOAT COLLAR, 99 JTS. CSG. 1 MARKER JTS. SET AT 4335' MD, 105 JTS. 4 1/2" 11.6 PPF I-80 CSG. OVER ALL LENGTH 8875.18' SET AT 8875.18. CENTRALIZED WITH 15 BOW SPRINGS, 1 ON FIRST 2 JTS. THEN EVERY 3RD JT. SPACE OUT, INSTALL HANGER, LAND AND PU TO CIRC.
	12:30 - 15:00	2.50	DRLPRO	05	D	P		CIRCULATE BOTTOMS UP WITH RIG PUMP. HELD SAFETY MEETING WITH BJ.
	15:00 - 17:00	2.00	DRLPRO	12	E	P		INSTALL PLUG RETAINER. SWITCH TO BJ, TEST LINES TO 5000 PSI AND CEMENT 4 1/2" AS FOLLOWS: 40 BBLS WATER, LEAD W/ 630 SKS PL2 MIXED @ 12.5 PPG, TAIL W/ 1100 SKS 50:50 POZ MIXED @ 14.3 PPG, WASH LINES, DROP PLUG & DISPLACE W/ 137 BBLS WATER W/ .1 GAL/BBL CLAYFIX & .01 GAL/BBL ALDACIDE G TO BUMP PLUG WITH 3200 PSI. FINAL LIFT PSI 2700 PSI. STARTED LOSING PARTIAL RETURNS AFTER DROPPING THE PLUG AND LOST FULL RETURNS 13 BBLS PRIOR TO BUMPING. HAD NO CEMENT OR WATER TO SURFACE. RELEASE PSI FLOATS HELD.
	17:00 - 18:00	1.00	DRLPRO	12	A	P		LAND HANGER. RIG DOWN BY, REMOVE LANDING JOINT.
	18:00 - 21:00	3.00	DRLPRO	14	A	P		ND BOP'S, INSTALL NIGHT CAP. CLEAN PITS. SKID RIG TO THE NBU 1022-2O2S.

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/4/2009	End Date: 9/16/2009
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/4/2009	7:00 - 12:00	5.00	COMP	37	B	P		OPEN WELL 0#. PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF F/ 8784'-90', 4 SPF, 18 HOLES. 8714'-18', 4 SPF, 16 HOLES. 8628'-30', 3 SPF, 8 HOLES. POOH. READY T/ BEG FRAC 09/08. SWI, SDFWE.
9/8/2009	8:30 - 18:00	9.50	COMP	36	B	P		OPEN WELL 1811#. STG 1)BEG PUMP, BRK @ 4364# @ 6.4 BPM. SD ISIP 2500#, FG .72. BEG FRAC, PUMP 91,328# 30/50 WHITE & TAIL IN W/ 5,000#. SD ISIP 2800#, FG .75. SWI. X-OVER T/ RED WELL. ((WHILE GOING T/ FLUSH TOP FRAC VALVE STARTED LEAKING OUT OF STEM. TIGHTEN STEM NUT. SLOWWED LEAK DOWN BUT DIDN'T STOP. CALL FOR PARTS & NEW VALVE.)) STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8572' P/U PERF F/ 8538'-42', 4 SPF, 16 HOLES. 8508'-10', 4 SPF, 8 HOLES. 8418'-22', 4 SPF, 16 HOLES. POOH. 12:47 OPEN WELL 2600#. BEG PUMP, BRK @ 4190# @ 5.3 BPM. SD ISIP 2700# FG .75. BEG FRAC, PUMP 16,769# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2700# FG .75. SWI X-OVER T/ GREEN WELL. ((COULD NOT GO T/ RED BECAUSE WL HAD A MISS RUN.)) STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8366' P/U PERF F/ 8332'-36', 4 SPF, 16 HOLES. 8296'-00', 3 SPF, 12 HOLES. 8264'-66', 4 SPF, 8 HOLES. 8248'-50', 4 SPF, 8 HOLES. POOH. 3:30 OPEN WELL 2490#. BEG PUMP, BRK @ 3912# @ 6.5 BPM. SD ISIP 2500# FG .73. BEG FRAC. EST INJT RT @ 51.3 BPM @ 4300# =100% PERF'S OPEN. PUMP 17,592# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2700# FG .76. SWI. X-OVER RED WELL. STG 4) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8190' P/U PERF F/ 8148'-54', 3 SPF, 18 HOLES. 8114'-16', 4 SPF, 8 HOLES. 8084'-86', 4 SPF, 8 HOLES. 8066'-68', 4 SPF, 8 HOLES. POOH. SWI. SDFN.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/4/2009	End Date: 9/16/2009
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/9/2009	8:30 - 18:00	9.50	COMP	36	B	P		STG 4) OPEN WELL 2020#. BEG PUMP, BRK @ 3427# @ 3.4 BPM. SD ISIP 2450# FG .73. BEG FRAC, EST INJT RT @ 51.3 BPM @ 4350# = 100% PERF'S OPEN. PUMP 81,959# 30/50 WHITE & CUT SAND DUE T/ PSI INCR. ((PSI CLIMBED UP T/ 6880# CUT SAND WENT T/ FLUSH. NO 20/40 TLC IN THIS STG.)) SD ISIP 2900# FG .79. SWI. FRAC CREW X- OVER T/ RED WELL. STG 5)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7968' P/U PERF F/ 7934'-38', 3 SPF, 12 HOLES. 7870'-74', 3 SPF, 12 HOLES. 7788'-90', 4 SPF, 8 HOLES. 7750'-52', 4 SPF, 8 HOLES. POOH. 12:35PM OPEN WELL 2487#. BEG PUMP, BRK @ 4690# @ 6.3 BPM. SD ISIP 2800# FG .79. BEG FRAC, EST INJT RT @ 51.3 BPM @ 4400# =100% PERF'S OPEN. PUMP 60,007# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2500# FG .75. SWI. FRAC CREW X-OVER T/ RED WELL. STG 6)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. WHILE SWINGING PLUG & GUN OVER T/ BLUE WELL, OPERATER IN WL TRUCK PU ON GUN T/ FAR & PARTED WL. GUN & PLUG FELL DOWN T/ GROUND, NOCKING SLIPS OFF OF PLUG. LD GUN BY HAND. REPLACE CBP & REHEAD. PU GUN & NEW CBP & RIH SET CBP @ 7724' P/U PERF F/ 7690'-92', 4 SPF, 8 HOLES. 7630'-34', 3 SPF, 12 HOLES. 7554'-58', 3 SPF, 12 HOLES. 7488'-90', 4 SPF, 8 HOLES. POOH. 3:31 OPEN WELL 2125#. BEG PUMP, BRK @ 2485# @ 6.3 BPM. SD ISIP 2150# FG .71. BEG FRAC, EST INJT RT @ 51.3 BPM @ 4180# =100% PERF'S OPEN. PUMP 68,997# 30/50 WHITE & 5,000# 20/40 TLC. SD ISIP 2450# FG .75. SWI. FRAC CREW X-OVER T/ RED. STG 7)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7306' P/U PERF F/ 7264'-68', 3 SPF, 12 HOLES. 7120'-22', 4 SPF, 8 HOLES. 7072'-74', 4 SPF, 8 HOLES. 7040'-42', 4 SPF, 8 HOLES. 6994'-96', 3 SPF, 6 HOLES. POOH. SWI SDFN. READY T/ FRAC IN THE :AM.

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/4/2009	End Date: 9/16/2009
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/10/2009	8:30 - 18:00	9.50	COMP	36	B	P		STG 7) OPEN WELL 1100#. BEG PUMP, BRK @ 3220# @ 6.3 BPM. SD ISIP 1600# FG .65. BEG FRAC, EST INJT RT @ 53.4 BPM @ 3650# = 100% PERF'S OPEN. PUMP 57,757# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2350# FG .76. SWI. FRAC CREW X-OVER T/ 40RED WELL. STG 8)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6926' P/U PERF F/ 6892'-96', 4 SPF, 16 HOLES. 6800'-04', 4 SPF, 16 HOLES. 6764'-66', 4 SPF, 8 HOLES. POOH. 11:21 OPEN WELL 1465#. BEG PUMP, BRK @ 2989# @ 6.4 BPM. SD ISIP 1800# FG .69. BEG FRAC, EST INJT RT @ 55.2 BPM @ 4100# =95% OPEN PERF'S. PUMP 17,889# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2450# FG .79. SWI. X-OVER T/ RED WELL. STG 9)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6606' P/U PERF F/ 6566'-76', 4 SPF, 40 HOLES. POOH. OPEN WELL 400#. BEG PUMP, BRK @ 2209# @ 6.4 BPM. SD ISIP 1500# FG .66. BEG FRAC, EST INJT RT @ 54 BPM @ 3650# = 99% PERF'S OPEN. PUMP 31,932# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2400# FG ..80. SWI. X-OVER T/ YELLOW WELL T/ REFLUSH.
9/16/2009	7:00 - 7:30	0.50	COMP	48		P		DRILL PLUGS

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/4/2009	End Date: 9/16/2009
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 18:00	10.50	COMP	30		P		MOVE IN RU RIG ND FRAC VALVES NU BOPS CHANGE PIPE RAM BLOCKS TEST TO 3000# RU FLOOR & TUB EQUIP RIH TAG KILL PLUG PLUG #1 TAG SAND @ 6506' C/O & DRILL THRU HALLI CBP@ 6516' IN 5 MIN W/ 0# INCREASE PLUG #2 CONTINUE TO RIH TAG SAND @ 6586' {20' FILL} C/O & DRILL THRU HALLI CBP@6606' IN 7 MIN W/ 75 # INCREASE PLUG #3 CONTINUE TO RIH TAG SAND @ 6896' { 30' FILL} C/O & DRILL THRU HALLI CBP@6926' IN 6 MIN W/100 # INCREASE PLUG #4 CONTINUE TO RIH TAG SAND @ 7276' {30' FILL} C/O & DRILL THRU HALLI CBP@7306' IN 6 MIN W/ 0 # INCREASE PLUG #5 CONTINUE TO RIH TAG SAND @ 7691'{ 35' FILL} C/O & DRILL THRU HALLI CBP@ 7726' IN 5 MIN W/ 75# INCREASE PLUG #6 CONTINUE TO RIH TAG SAND @ 7938' { 30' FILL} C/O & DRILL THRU HALLI CBP@7968' IN 5 MIN W/ 100 # INCREASE PLUG #7 CONTINUE TO RIH TAG SAND @8155' { 35' FILL} C/O & DRILL THRU HALLI CBP@8190' IN 5 MIN W/ 125 # INCREASE PLUG #8 CONTINUE TO RIH TAG SAND @8341' {25' FILL} C/O & DRILL THRU HALLI CBP@8366' IN 3 MIN W/ 50# INCREASE PLUG #9 CONTINUE TO RIH TAG SAND @ 8542' {30' FILL} C/O & DRILL THRU HALLI CBP@ 8572' IN 3 MIN W/ 50 # INCREASE CONTINUE TO RIH TAG PBTD @ 8832' 0 SAND CIRC CLEAN RD PWR SWVL LD 106 JNTS LAND WELL ON HANGER W/ 173 JNTS IN HOLE EOT @ 5496.84 ND BOPS DROP BALL NU WELLHEAD PUMP OFF BIT SUB @ 2800# TOTALBBLS PUMPED 12908 BBLS RIG REC 2205 BBLS, 10703 BBLS LTR TURN WELL OVER TO FBC KB 13.00 HANGER 1.00 173 JNTS L-80 2-3/8" 5480.64 POBS 2.20 5496.84
9/17/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2000#, TP 2100#, 20/64" CK, 44 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 2868 BBLS LEFT TO RECOVER: 10040
9/18/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2800#, TP 2000#, 20/64" CK, 35 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 3813 BBLS LEFT TO RECOVER: 9095

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2J3S (BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-2J PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/4/2009	End Date: 9/16/2009
Active Datum: RKB @5,053.01ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/19/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2700#, TP 2050#, 20/64" CK, 31 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4597 BBLS LEFT TO RECOVER: 8311
9/20/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2550#, TP 2000#, 20/64" CK, 26 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 5263 BBLS LEFT TO RECOVER: 7645
	10:00 -		PROD	50				WELL TURNED TO SALE @ 1000 HR ON 9/20/09 - FTP 2100#, CP 2650#, 1900 MCFD, 26 BWPD, 20/64 CK
9/21/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2550#, TP 2050#, 20/64" CK, 21 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5811 BBLS LEFT TO RECOVER: 7097
9/22/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2500#, TP 2050#, 16/64" CK, 19 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 6283 BBLS LEFT TO RECOVER: 6625

API Well No: 43047502170000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6587 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 2 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/16/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP respectfully requests to change the surface casing for this well from 1,900' to 2,050'. Please see the attached drilling diagram for additional details. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: May 18, 2009

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 5/13/2009

RECEIVED May 13, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047502170000

Surface casing shall be cemented from setting depth back to surface.

Approved by the
Utah Division of
Oil, Gas and Mining

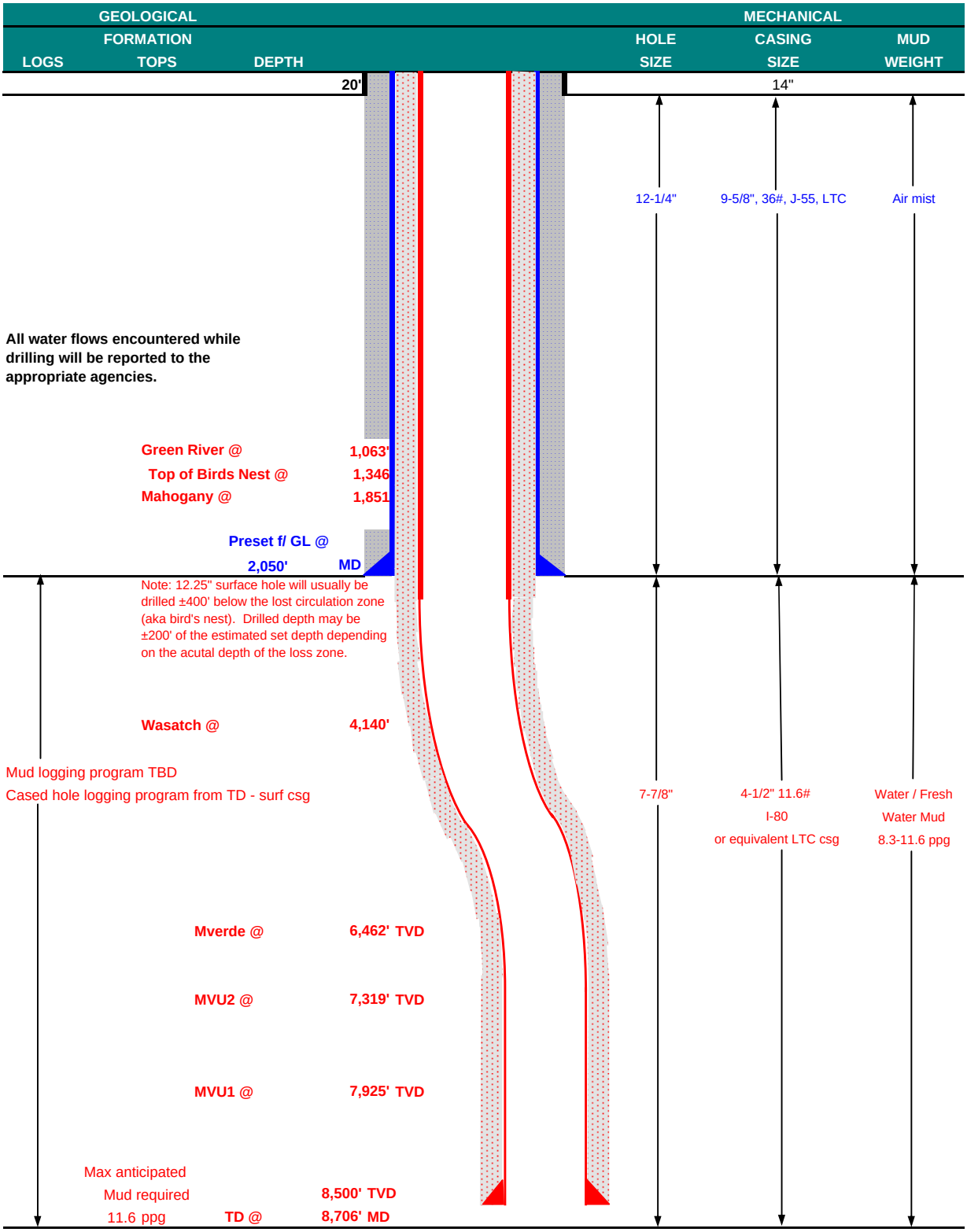
Date: May 18, 2009

By:

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	May 13, 2009		
WELL NAME	**NBU 1022-2J3S**			TD	8,500'	TVD	8,706' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	ELEVATION	5,040' GL KB 5,055'
SURFACE LOCATION	NW/4 SE/4	2,362' FSL	1,612' FEL	Sec 2	T 10S	R 22E	
	Latitude:	39.977214	Longitude:	-109.402739		NAD 27	
BTM HOLE LOCATION	NW/4 SE/4	1,525' FSL	2,050' FEL	Sec 2	T 10S	R 22E	
	Latitude:	39.974919	Longitude:	-109.404306		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), Tri-County Health Dept.						



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,050	36.00	J-55	LTC	1.06	2.11	7.81
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8,706	11.60	I-80	LTC	2.39	1.24	2.28

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.6 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,161 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 11.6 ppg) 0.59 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,031 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.25 pps Flocele + 3% salt BWOW				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,636'	Premium Lite II + 3% KCl + 0.25 pps	350	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,070'	50/50 Poz/G + 10% salt + 2% gel	1240	40%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Grant Schluender

DRILLING SUPERINTENDENT: _____ **DATE:** _____
John Merkel / Lovel Young

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/3/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	✓ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator request the authorization to temporariy abandon the subject well location. The operator proposes to TA the subject well to drill the NBU 1022-2J Pad, which consists of the following wells: NBU 1022-2G4BS, NBU 1022-2G4CS, NBU 1022-2H4CS, NBU 1022-2I1BS, NBU 1022-2J4BS & NBU 1022-2O1CS.

Approved by the Utah Division of Oil, Gas and Mining

Date: 11/23/2011

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE N/A		**DATE** 11/3/2011

RECEIVED Nov. 03, 2011

Well Name: NBU 1022-2J3S 11/2/2011
Surface Location: NWSE Sec. 2, T10S, R22E
Uintah County, UT

API: 43043750217 **LEASE#:** ML-22651

ELEVATIONS: 5040' GL 5052' KB

TOTAL DEPTH: 8882' **PBTD:** 8832'

SURFACE CASING: 9 5/8", 36# J-55 @ 2034'

PRODUCTION CASING: 4 1/2", 11.6# I-80 @ 8875'
TOC @ ~958' per CBL

PERFORATIONS: MESAVERDE 6566' – 8790'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 36# J-55	8.765	2020	3520	3.247	0.434	0.0773
Annular Capacities						
2.375" tbg. X 4 ½" 11.6# csg				0.4227	0.0565	0.01
4.5" csg X 9 5/8" 36# csg				2.227	0.2977	0.053
4.5" csg X 7.875 borehole				1.704	0.2278	0.0406
9.625" csg X 12 1/4" borehole				2.3428	0.3132	0.0558

GEOLOGICAL TOPS:
4327' Wasatch
6591' Mesaverde

Tech. Pub. #92 Base of USDW's
USDW Elevation ~1600' MSL
USDW Depth ~3452' KBE

Recommended future action for disposition of well bore:
Temporarily abandon the wellbore during the drilling and completion operations of the **NBU 1022-2J** pad wells. Return to production as soon as possible once completions are done.

RECEIVED Nov. 03, 2011

NBU 1022-2J3S TEMPORARY ABANDONMENT PROCEDURE

GENERAL

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDE. PREMIX 5 GALLONS PER 100 BBLS FLUID.
- NOTIFY UDOGM 24 HOURS BEFORE MOVING ON LOCATION.

PROCEDURE

Note: An estimated 24 sx Class "G" cement needed for procedure

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.

2. RU WIRELINE. ENSURE WELLBORE IS CLEAN. **A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.**

3. **PLUG #1, ISOLATE MV PERFORATIONS (6566' – 8790'):** RIH W/ 4 ½" CBP. SET @ ~6510'. RELEASE CBP, PUH 10', BRK CIRC W/ FRESH WATER. PRESSURE TEST CASING TO 500 PSI. INFORM ENGINEERING IF IT DOESN'T TEST. DISPLACE A MINIMUM OF **8 SX/ 1.6 BBL/ 8.7 CUFT**. ON TOP OF PLUG. PUH ABOVE TOC (~6410'). REVERSE CIRCULATE W/ TREATED FRESH WATER.

4. **PLUG #2, PROTECT TOP OF WASATCH (4327'):** PUH TO ~4430'. BRK CIRC W/ FRESH WATER. DISPLACE A MINIMUM OF **16 SX / 3.3 BBL / 18.3 CUFT** AND BALANCE PLUG W/ TOC @ ~4220' (210' COVERAGE). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED FRESH WATER.

5. LOWER WELLHEAD TO GROUND LEVEL TO ACCOMMODATE DRILLING OPS AND INSTALL MARKER PER UDOGM GUIDELINES.

6. RDMO. TURN OVER TO DRILLING OPERATIONS.

ALM 11/2/2011

RECEIVED Nov. 03, 2011

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739991	NBU 1022-04P1T		SESE	4	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	4/20/2009			4/29/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 04/20/2009 AT 1200 HRS.

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750218	NBU 1022-2J2S		NWSE	2	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	4/21/2009			4/29/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 04/21/2009 AT 0900 HRS. BHL = NWSE

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750217	NBU 1022-2J3S		NWSE	2	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	4/21/2009			4/29/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 04/21/2009 AT 1300 HRS. BHL = NWSE

ACTION CODES:
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO
Name (Please Print)
Signature
REGULATORY ANALYST
Title
4/24/2009
Date

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(5/2000)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML-22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304750217

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 2362'FSL, 1612'FEL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: WELL SPUD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 04/21/2009 AT 1300 HRS.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE REGULATORY ANALYST

SIGNATURE DATE 4/24/2009

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(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML-22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304750217

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 2362'FSL, 1612'FEL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: SET SURFACE CSG
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO AIR RIG ON 04/24/2009. DRILLED 12 1/4" SURFACE HOLE TO 2060'. RAN 9 5/8" 36# J-55 SURFACE CSG. CMT W/350 SX PREM CLASS G @15.8 PPG 1.15 YIELD. NO RETURNS THROUGH OUT JOB 130 PSI LIFT LAND PLUG W/800 PSI FLOATS DID NOT HOLD SHUT IN WELL. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN BACKSIDE. 2ND TOP OUT W/175 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN BACKSIDE. 3RD TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN BACKSIDE. 4TH TOP OUT W/175 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN BACK SIDE GOOD CMT TO SURFACE HOLE STAYED FULL.

WORT.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE REGULATORY ANALYST

SIGNATURE DATE 4/29/2009

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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2J3S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047502170000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6100

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2362 FSL 1612 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☑ SUBSEQUENT REPORT Date of Work Completion: 10/27/2014	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☑ OTHER	OTHER: BACKSIDE BRIDGE

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

KERR-MCGEE OIL & GAS ONSHORE, L.P.HAS COMPLETED THE FOLLOWING WORKOVER-BACKSIDE BRIDGE ON THE NBU 1022-2J3S. SEE ATTACHED OPERATIONS SUMMARY REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
November 13, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Doreen Green	435 781-9758	Regulatory Analyst II
SIGNATURE N/A		**DATE** 11/11/2014

RECEIVED: Nov. 11, 2014

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-2J3S (ORIGINAL WELL-BLUE)	Spud Conductor: 4/21/2009	Spud Date: 4/24/2009
Project: UTAH-UINTAH	Site: NBU 1022-02J PAD	Rig Name No:
Event: WELL WORK EXPENSE	Start Date: 10/17/2014	End Date: 10/27/2014
Active Datum: RKB @5,053.00usft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NWSE/6/PM/S/2,362.00/E/0/1,612.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
10/17/2014	7:00 - 11:00	4.00	MAINT	35		P		rih w jdc tool 8394 pooh w pcs solid sand plunger 1.88, rih w jdc tool 8394 latched and pooh w pcs high impact, shut well in for rig cp -10 tp 287
10/20/2014	7:00 - 7:15	0.25	MAINT	48		P		HSM, JSA
	7:15 - 13:00	5.75	MAINT	30	A	P		MIRU, 0# SICP, 1000# SITP, CONTROL TBG W/ 30 BBLS T-MAC, ND WH, NU BOP'S, RU FLOOR & TBG EQUIP
	13:00 - 16:30	3.50	MAINT	31	I	P		WORK STUCK TBG, TBG STILL STUCK, LEAVE TBG IN COMPRESSION, SDFN
10/21/2014	7:00 - 7:15	0.25	MAINT	48		P		HSM, JSA
	7:15 - 7:30	0.25	MAINT	31	I	P		WORK STUCK TBG, TBG STILL STUCK, DROP STANDING VALVE & FILL TBG W/ T-MAC
	7:30 - 11:00	3.50	MAINT	34	A	P		MIRU CUTTERS WIRELINE, RIH W/ STUCK PIPE LOG, FIND TBG STUCK @ 6545', POOH, RIH W/ 4 HOLE TBG PUNCH, PUNCH TBG @ 6545', POOH, WORK STUCK TBG 10 MINS & TBG PULLED FREE, RD CUTTERS
	11:00 - 12:30	1.50	MAINT	31	D	P		RIH W/ JDC ON SANDLINE, LATCH STANDING VALVE BUT COULD NOT PULL, POOH W/ JDC
	12:30 - 17:00	4.50	MAINT	31	I	P		MIRU SCAN TECH, TOOH & SCAN 2-3/8" TBG, TBG SCAN SHOWED 74 YELLOW JTS, 62 BLUE JTS & 130 RED JTS, THE RED JTS WERE LAID DN DUE TO WALL LOSS & PITTING, VERY LITTLE SCALE, RD SCAN TECH, SDFN
10/22/2014	7:00 - 7:15	0.25	MAINT	48		P		HSM, JSA
	7:15 - 13:00	5.75	MAINT	31	I	P		900# SICP, CONTROL WELL W/ 30 BBLS T-MAC, MU X-LONG 3-7/8" SLAUGH MILL, TIH W/ 2-3/8" TBG, TAG FILL @ 8618', MIRU PWR SWVL
	13:00 - 17:00	4.00	MAINT	44	D	P		MIRU WEATHERFORD FOAM, BREAK CIRC IN 1HR 30 MINS, C/O FROM 8618' TO PBTD (8795'), CIRC WELL CLEAN, RD WEATHERFORD
	17:00 - 18:30	1.50	MAINT	31	I	P		TOOH & LD 13 JTS ON TRAILER, STAND BACK 30 STANDS IN DERRICK, SWI, SDFN
10/23/2014	7:00 - 7:15	0.25	MAINT	48		P		HSM, JSA
	7:15 - 14:00	6.75	MAINT	31	I	P		600# SICP, CONTROL WELL W/ 20 BBLS T-MAC, TOOH W? 2-3/8" TBG, DL MILL, MU XN NIPPLE, TIH W/ 2-3/8" TBG, LAND TBG ON HANGER W/ 265 JTS, BROACH TBG W/ 1.910 BROACH TO XN
	14:00 - 17:00	3.00	MAINT	30	C	P		ND BOP'S NU WH, SWI, RDMO KB 13' HANGER .83' 132 JTS 2-3/8" L-80 TBG 4175.88' 6' PUP JNT 2-3/8" L-80 6.13' 133 JTS 2-3/8" J-55 TBG 4204.39' EOT @ 8401.28'
10/24/2014	7:00 - 10:00	3.00	PROD.	42	B	P		SWABBING
10/27/2014	7:00 - 11:00	4.00	MAINT	35		P		Broached to SN @ 8401'. Ran through SN with scratcher. Set new high impact BS @ 8401'. RTP

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